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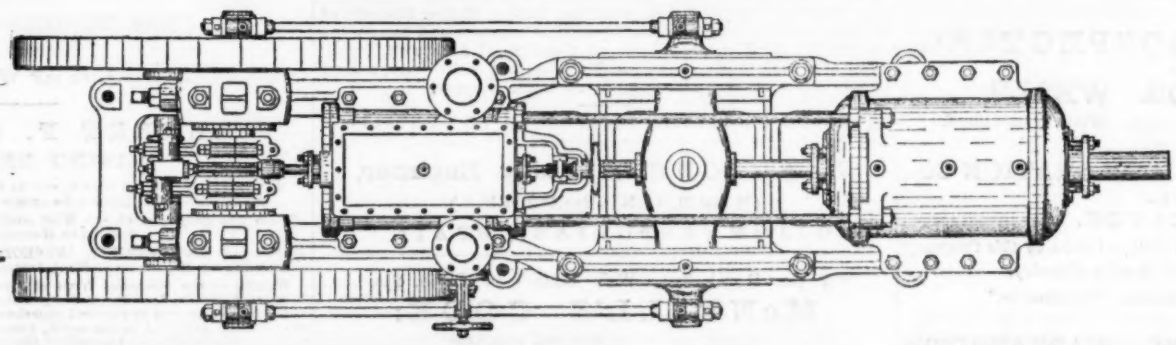

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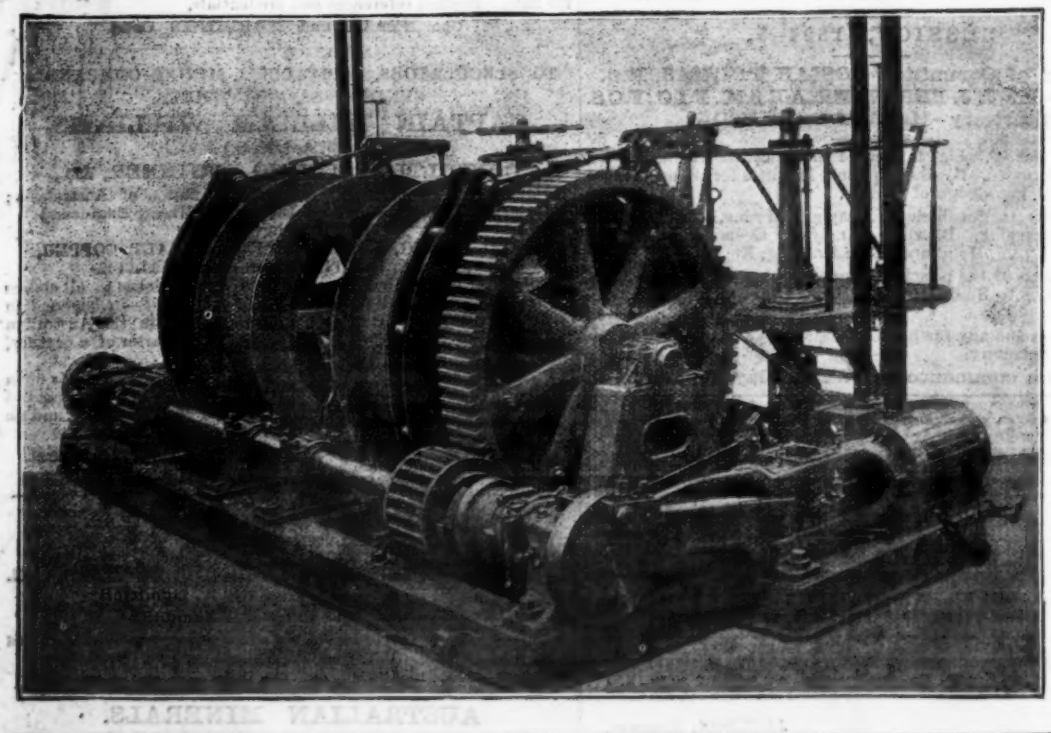

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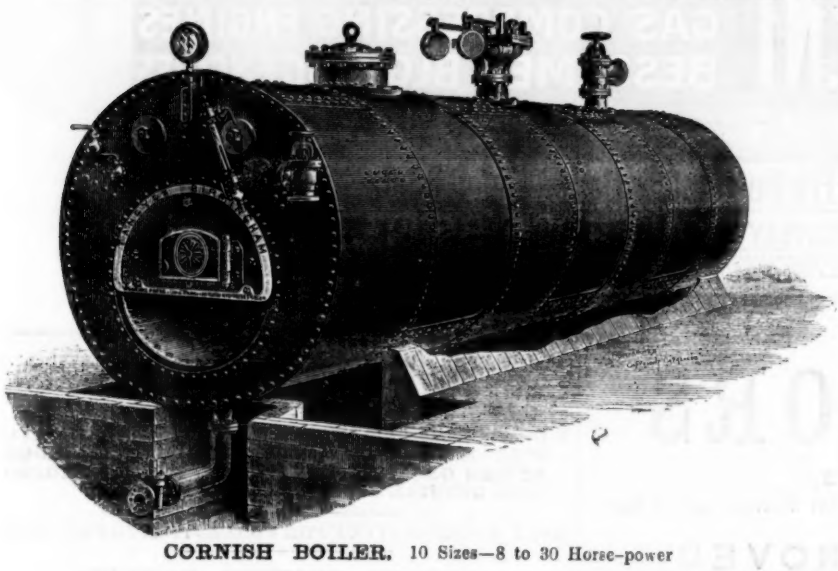

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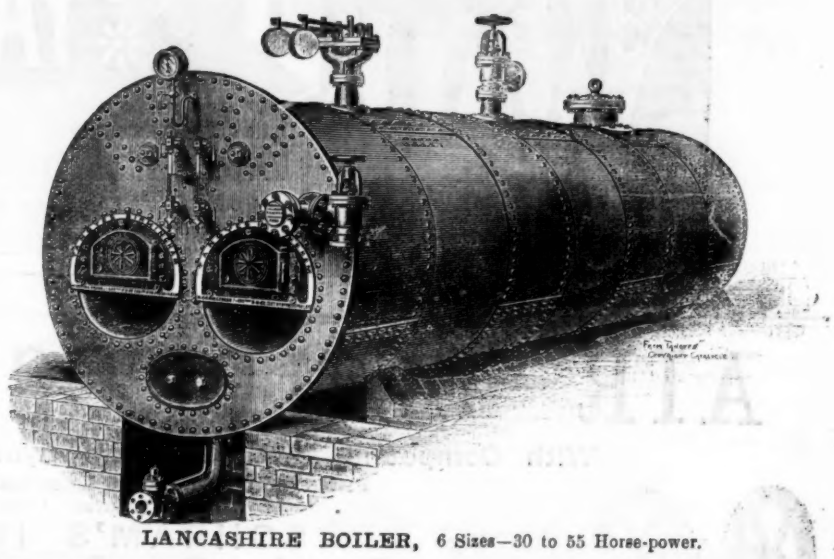

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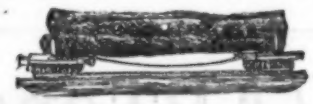

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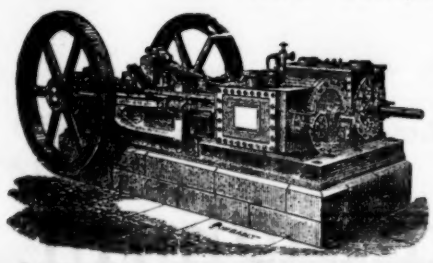
THIS GEARING IS NOW EXTENSIVELY IN USE FOR HAULAGE PURPOSES.

The objects attained are SIMPLICITY, ENDURANCE OF THE MACHINERY AND ROPES with a MINIMUM EXPENDITURE OF POWER.

AIR COMPRESSORS

With Compound Air and Steam Cylinders,
Fitted with SCHRAM'S Inlet and Outlet Valves giving the greatest efficiency.



SCHRAM'S IMPROVED
Rock Boring Machines.

Supplied to the Indian, Colonial, and other Governments.
2500 IN USE in all PARTS of the WORLD.

DIAMOND PROSPECTING DRILLS.

"OPTIMUS" COMPOUND ROCK DRILL.

(P. J. OGLE'S PATENT.)

Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

ESTIMATES AND FULL PARTICULARS ON APPLICATION.

RICHARD SCHRAM & CO., 17a, Great George Street, Westminster, S.W.

TELEGRAMS: "SCHRAM, LONDON," A1, A.B.C. and The Engineering Telegraph Codes Used.

Telegrams—Green, Foundry, Aberystwyth.

SILVER MEDALS AWARDED AT THE ROYAL CORNWALL POLYTECHNIC, 1872 & 1876; GOLD MEDAL AWARDED AT THE GREAT INTERNATIONAL MINING EXHIBITION, CRYSTAL PALACE, 1890.

ONLY AWARDS GIVEN FOR CONCENTRATION PLANTS

GEORGE GREEN'S PATENT
Self-Acting or Automatic Ore Dressing Machinery,

A Special Plant, on a reduced scale, has been erected at the Works by which samples of METALLIC ORES—up to Five Tons may be treated, and the commercial value determined, in this way the most suitable arrangement of Plant is ascertained, a considerable advantage to intending Purchasers of Crushing and Concentrating Plant.

GOLD STAMP AND OTHER MILLS.

GEORGE GREEN,
THE FOUNDRY, ABERYSTWYTH.

Gold Medal, International Exhibition, Paris, 1889. *Gold Medal, Exhibition of Mining & Metallurgy, London, 1890.*

PURE ALUMINIUM 98 to 99½ per cent. pure; guaranteed 98 per cent. minimum.
FERRO-ALUMINIUM, ALUMINIUM BRONZE, &c.,

For Iron and Steel Workers,
Founders, Engineers,
And all Metal Workers.

ALUMINIUM.

For prices of above apply to

HENRY R. MERTON & CO.,
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Sole Agents in Great Britain and Ireland for the Aluminium Industry, Co., Neuhausen, Switzerland.

A. & J. STEWART and CLYDESDALE, Limited.
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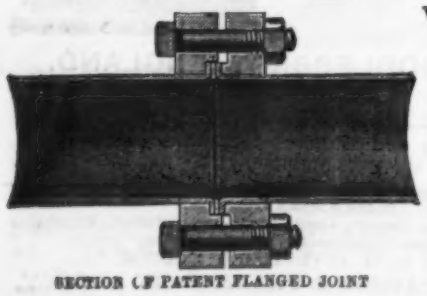
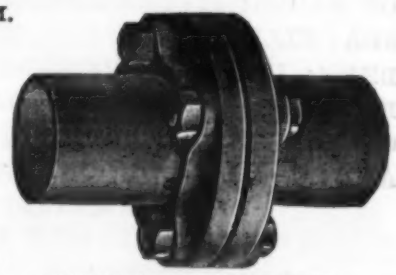
WROUGHT IRON WELDED TUBES and FITTINGS for GAS, WATER, and STEAM.
Light Lap-welded Wrought-iron and Steel Tubes
(SPECIALLY ADAPTED FOR MINES).
With Patent Flanged Joints (as illustrated) for the Conveyance of Water, Steam, and Air, at High and Low Pressures.



SECTION OF PATENT FLANGED JOINT

LAP-WELDED IRON AND STEEL BOILER TUBES
FOR LOCOMOTIVE, MARINE, AND OTHER MULTITUBULAR BOILERS.

STEEL & IRON PLATES FOR BOILERS, BRIDGES, &c.



PLAN OF PATENT FLANGED JOINT.

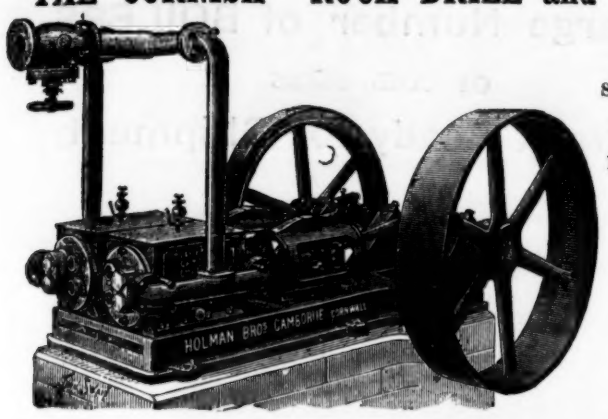
Head Offices: 41, OSWALD STREET, GLASGOW.

HOLMAN Bros., Camborne, Cornwall.

ESTABLISHED 1839

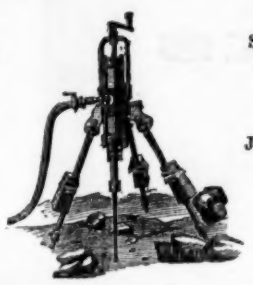
Patentees and Sole Makers of

"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



FIRST SILVER MEDAL, Highest Award, Mining Institute Contest, 1881.

Three Makers represented.



FIRST SILVER MEDAL Highest Award, Royal Cornwall Polytechnic Jubilee Exhibition Contest, 1882.

Five Makers represented.

AWARDED SILVER MEDAL INTERNATIONAL INVENTIONS EXHIBITION, 1885.

RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour.

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

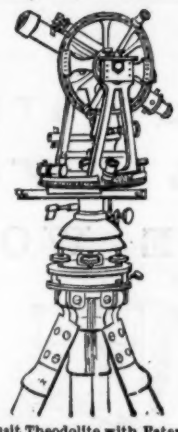
Estimates for ROCK BORING PLANT and GENERAL MINING MACHINERY on Application.

London Representative: Mr. E. M. TOUZEAU, Leadenhall Buildings, London, E.C.

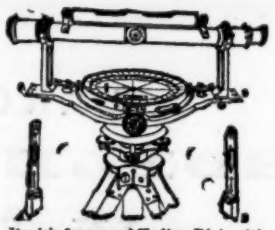
JOHN DAVIS AND SON,

ALL SAINTS WORKS, DERBY;

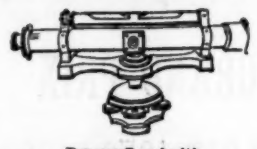
118, NEWGATE STREET, LONDON.



Transit Theodolite with Patent Hoffman Tripod Head, and Trough Compass.



Davis's Improved Hedley Dial, with Telescope and Sights Interchangeable and Patent Hoffman Tripod Head.



Dumpy Level with Hoffman Patent Tripod Head.

MINING, SURVEYING AND ENGINEERING INSTRUMENTS

THEODOLITES. LEVELS.

Davis's Improved Hedley Miners' Dials with HOFFMAN PATENT TRIPOD HEAD.

AND ALL DESCRIPTIONS OF MATHEMATICAL AND MINING SURVEYING INSTRUMENTS.

Revised Illustrated Catalogues Free to any Part of the World.

SECTION (A) MATHEMATICAL DEPARTMENT AND SAFETY LAMPS
SECTION (B) ELECTRICAL DEPARTMENT.

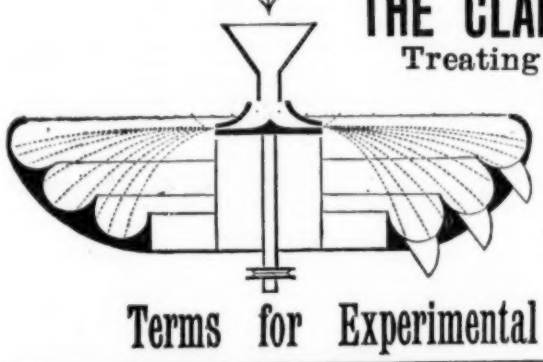
Gold Medal Awarded Mining Exhibition, 1890.

"THE ENGINEERING TELEGRAPH CODE USED."

HENDERSON'S RAPID TRAVERSER.

Highest Award at the Mining Exhibition, 1890.

DRY CONCENTRATION.



THE CLARKSON-STANFIELD CONCENTRATOR (LIMITED), are successfully

Treating the ores of Gold, Silver, Copper, Lead, Tin, Zinc, Cobalt, &c., &c. of all degrees of fineness, from 30 to the finest meshes by their **NEW** MACHINERY which may be seen in operation at

6, COLONIAL AVENUE, MINORIES, LONDON, E.

Homogeneous substances, such as Emery, Glass, Sand, Sulphur, Black Lead, &c., graded according to size in one operation.

Terms for Experimental Concentration, and for Supply of Machines on Application.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 27, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

15046 Thomas Sumner, 1*, Victoria Road, Liverpool.—An improved water tube boiler.—August 7.
15060 George Cecil Dymond, 8, Lord Street, Liverpool.—Improvements in or appertaining to furnaces.—August 7.
15071 Orland Dore Orain, 45, Southampton Buildings, Chancery Lane, London.—Improvements in steam boiler and other furnaces.—August 7.
15075 L. H. Rutherford, 97, Newgate Street, London.—An improved automatic governor for steam engines.—August 7.
15127 George Alfred Newall, Bristol Bank Buildings, Bristol.—An improved steam engine.—August 8.
15272 James Edwardes Weyman, The Church Acre Iron Works, Guilford.—Improvements in oil or hydrocarbon engines.—August 10.
15298 William Schmidt, 1, Broad Street Buildings, Liverpool Street, London.—An improved tubulous boiler with superheater.—August 10.
15340 Cyrus Coplantz, Monument Chambers, King William Street, London.—Improvements in horse shoes.—August 11.

We are sorry we have not the usual list, but owing to the holidays few patents have been taken out.

MR. JAMES A. MACTEAR, mining engineer, leaves England by the steamship *Rome* on the 31st instant for West Australia, as assistant engineer to the well-known firm of mining engineers and mine managers, Messrs. Bewick, Moreing, and Co., in that country. Mr. Mactear is, we understand, well fitted for this responsible position, having served his articles with the above firm, and having had lengthened practical experience in the mines of the North of England, he has also visited the United States of America as assistant to one of the partners of the firm, in connection with the gold mining industry, in addition to having had considerable experience in that comparatively little known industry, the mining and metallurgy of quicksilver. He professionally visited Servia in October and November of last year, and has only lately returned from the Pyrenees, where he has been engaged surveying the mines of Las Cabesses, in which is worked the extensive and unique deposit of carbonate of manganese. Mr. Mactear is son of the well-known chemical engineer Mr. James Mactear, under whose guidance he has acquired an adequate knowledge of chemical science.

WE call the attention of our readers to an advertisement of a sale of land in Devonshire by Messrs. Heath Bros., of Exeter, containing a valuable bed of the finest clay. We understand that it has been reported on by some eminent surveyors and experts, and a portion of it (about 40 acres) has been valued at upwards of £50,000. The land adjoining has, it is stated, sold at £400 per acre, and situated at a lower level. The demand now for terra cotta and sewage socket glazed pipe is increasing daily, and this property might be well worth the consideration of speculators.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

**** We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.*

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Reservoir, August 23-30 (*Dunoon*). For constructing a reservoir, filters and tanks, and providing and laying cast iron and fire-clay pipes, for the Cowal District Committee of the County Council of Argyllshire. Plans and specifications to be obtained at the offices of Messrs. J. and A. Leslie and Reid, C.A., 72a, George Street, Edinburgh on the payment of £1.

Sinking Well, August 25 (*Worksop*).—For sinking a well, 160 feet by 9 feet, and containing a 15 inch by 12 inch borehole, to 360 feet, for the Worksop Waterworks Company. Plans, sections, and specifications, and other particulars may be obtained at the office of the engineer, Mr. John Allsopp, A.M.I.C.E., Worksop. Sealed tenders, endorsed "Tenders for Well," to be sent to Mr. R. Dowse, secretary, by 25th inst.

Railway Stores, August 28 (*London*).—Tenders required for supply of various stores, wheels, axles, springs, &c. Conditions of contract from the Director-General of Stores, India Office, Whitehall, S.W.

Coal, August 29 (*Ilkeston*).—For the supply, in whole or part, of gas coal from September 1, 1894, to July 31, 1895, for the Gas Committee. Forms of tender, &c., from Mr. F. C. Humphrys, Gas Works, Ilkeston.

Coal, September 3 (*Burton-on-Trent*).—For twelvemonths' supply and delivery of seconds and nuts, or first screenings, for the Burton-on-Trent School Board. Sealed tenders, endorsed "Tenders for Coal," to reach Mr. W. N. Graham, clerk, by September 3.

Hot Water Apparatus, September 6 (*London*).—For engineering work in connection with hot water supply apparatus, &c., at the Western Hospital, Fulham, S.W. Plans, &c., at the offices of Messrs. A. and C. Harston, 15, Leadenhall Street, E.C.

Sinking Shaft (*Ossett*).—For sinking shaft to the top and low Haigh Moor seams. Tenders to Victoria Mills, Ossett, Yorks.

Steam Boilers (*Wakefield*).—Tenders required by Messrs. McPhail and Simpsons, engineers, for the supply of seven steam boilers, Lancashire type, Applications to Messrs. McPhail and Simpsons, Calder Works, Wakefield.

SUCCESS OF A CORNISH MINE CAPTAIN.—We have received news by mail of the esteem in which he is held and of the high standing occupied in Australia by Captain William Williams, late of Cornwall, and of Ballarat. The training he has received in our West County, added to his untiring zeal and competency as a mining engineer of several large companies in Ballarat and other parts of Victoria, has made him quite an authority on the Australian Continent.

OVERHEARD IN A 'BUS.—"Sir, you are a clumsy fellow—you trod on my foot." "I am extremely sorry—I hope I did not hurt you very much." The soft answer turned away the other's wrath, and even produced an apology. "Oh, no, not very much—you must excuse me; I am a little irritable—fact is, out of sorts, liver, biliousness, and that sort of thing, you know—thoroughly wretched." "My dear sir, of course I excuse you ,but why don't you take som ething?" "Tried everything—no good." "Nonsense, you haven't tried Holloway's Pills, I know—they never fail in cases like yours." "Gad! I never thought of 'em. By jove, I'll try 'em at once. Hi conductor, stop the 'bus,"

OUR INQUIRY COLUMN.

TO CORRESPONDENTS.

Correspondents will please take note that all communications will in future be answered in this column and not through the medium of the post. All questions and replies should be accompanied by the name and address of the writer.

REPLIES.

B. R.—You could not do much harm by buying a dozen or so at the present low price.

J. R.—We will consider your suggestion.

R. W. G.—(1) We believe so.—(2) We have not heard of the company,

H. T. M.—There are a great many in your unfortunate position. We regret we are unable to assist you.

R. J. M.—The meeting is not held until the close of the year.

O. M. S.—There is no official quotation for the shares. We will consider what you say.

W. J. M.—The company is an American one. It is quite impossible to obtain a list of shareholders.

RISK.—We do not take a favourable view of them.

R. G.—You must take your chance like anybody else. There are many in Cornwall seeking vainly for employment. Your most economical plan would be to write to the principal managers giving your experience.

SIMPLEX.—(1.) We have little faith in the future of this company. Wait a little.—(2.) Hold on, for a time, at least.

H. V. R.—(1.) Sell in any fair advance.—(2.) Sell on any decent rise.—(3.) Not shares that should be held permanently.—(4.) No.

H. J. B.—We are making the necessary enquiries, and will write you during the ensuing week.

THE Londonderry looks like being a permanent vein, as on July 12 the men struck the reef in driving from the bottom of their 50 feet shaft. They found the stone to be as good below as it was at the surface. This discovery strengthens the opinion of the experts that a big mother reef will be opened running due north and south through Bayley's Reward.

THE Francis Reward Battery Company, on the Murchison, reports the following crushings:—Victory United, 50 tons, averaging 4½ ounces; Cue, 161 tons, at 1½ ounces.; Lilley, 50 tons, at 3 ounces; Lady Mary South, 18 tons, at 1½ ounces; Golden Stream, 78 tons, at 1¼ ounce; Lady Mary, 50 tons, at 3 ounces; Golden Gate, 28 tons, at 3½ ounces; Normandy, 50 tons, at 2 ounces; Cue North, 29 tons, at 2 ounces: Cue No. 1, 50½ tons, at 3 ounces; and Prospect, 16 tons, at 1½ ounces.

GALLOWAYS, LIMITED,

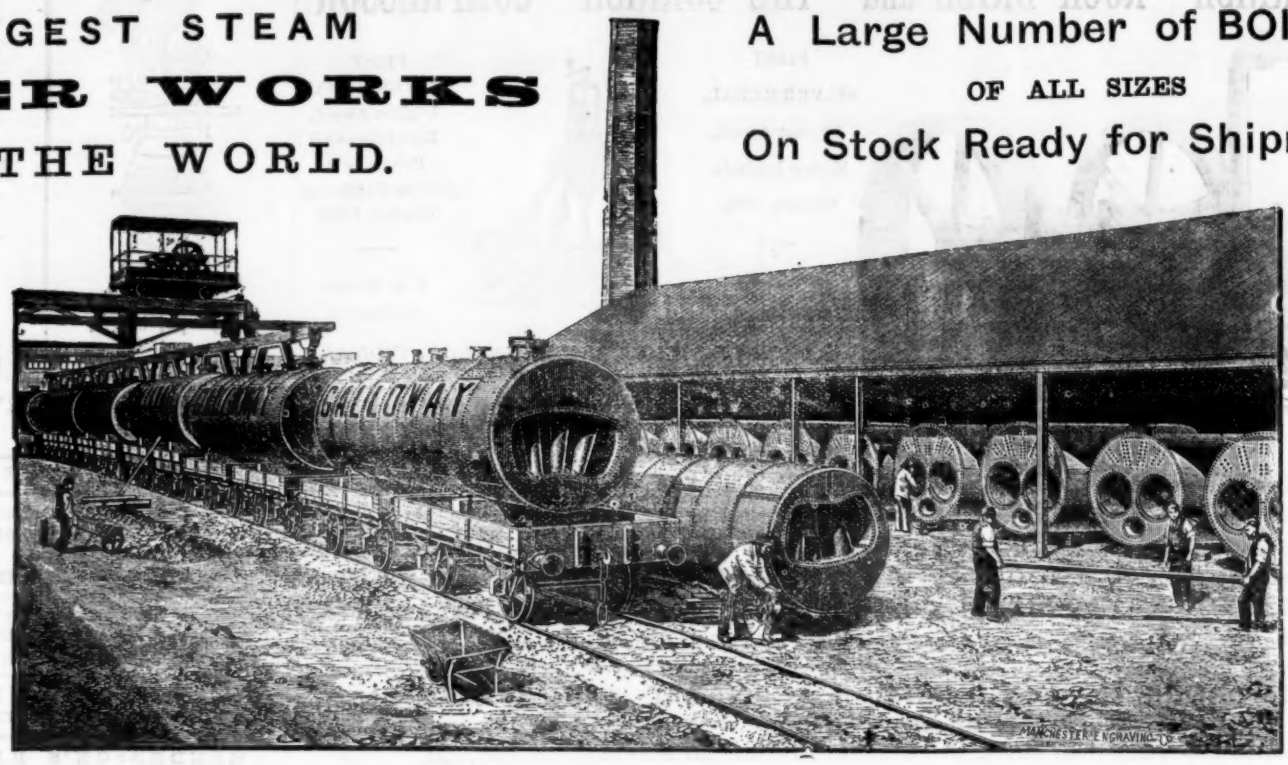
MANCHESTER.

LARGEST STEAM
BOILER WORKS
IN THE WORLD.

A Large Number of BOILERS
OF ALL SIZES
On Stock Ready for Shipment.

GRAND PRIX
PARIS, 1878 & 1889

GOLD MEDALS
AT ALL RECENT
EXHIBITIONS.



STANHOPE GOLD MINING COMPANY, LIMITED.

ABSTRACTS FROM THE REPORT OF R. J. GLUYAS.

THE following are taken from the recent report of Mr. Richard John Gluyas, written for the Stanhope Gold Mining Company (Limited), on about 60 claims on the farm "Tusschenby," adjoining the mynpacht of the Denny Dalton Gold Mining Company:—

Extent and Situation.

The area of ground proposed to be worked by this company consists of about 63½ claims, the one block consisting of about 50 and the other 13½ claims. Of these, the latter adjoin the former on their westerly boundary, and, running south, abut against the westerly boundary of the D.-D. B. Mynpacht. The larger block of 50 claims directly adjoins the northerly boundary of the D.-D. B. Mynpacht for its whole length, eventually terminating at the farm boundary.

These claims are portion of the farm Tusschenby, the property of the D.-D. Banket Gold Mining Company (Limited), and have been secured on option from the said company, in my opinion on favourable terms. At the western end of your claims rises the Golden Hill, a round-topped eminence, from 300 to 400 feet above the surrounding valley. This hill suddenly falls toward the eastward into your ground, and at about the centre of same has fallen quite to the depth before indicated, forming a narrow gully through which runs a small lasting stream. Immediately after passing this stream the ground again suddenly rises, and continues to increase in height until at the eastern portion of your ground the elevation is from 500 to 600 feet above the level of the main creek, which flows away to the Umfolosi River, distant in this direction about three miles.

Workings.

The only workings at present on your property consist of a shaft, 12 feet by 6 feet and 135 feet in depth, adjoining the northern boundary of the D.-D.B. Mynpacht, and near the upper or outcrop portion of your ground. The ore proper was struck in the shaft at a depth of 130 feet 6 inches. In character, this is very pyritic, with large pebbles of black quartz. A divisional layer of sandstone was met with at 132 feet, and immediately under this again was a thin vein of globular pyrites identical with that found in the workings of the D.-D. Banket Company. A panning of this showed very satisfactory results in free gold as well as pyrites. Underlying this again is pyritic ore, similar in appearance to that first mentioned. Unfortunately, a small crossing was met with about 20 feet from bottom of shaft, about 2 inches wide, composed of white quartz, and widened out to 18 inches by the time the footwall was reached.

This naturally disturbed the reef and gave it an unsatisfactory appearance. The fact of striking rich or poor ore in a shaft is one that does not weigh with me in the slightest. My experience has taught me to have a greater regard for the continuity and permanence of the formation, after I have been satisfied that gold exists in payable quantities at a well developed mine not far distant, than for any actual gold value at one given point. In arriving at the value of your property, I have taken as a basis the workings and the outcrops on other portions of this farm, notably the extensive development of the banket beds on the D.-D. Banket Mynpacht. There, owing to the courtesy of the management, I was shown thoroughly through the mine and its workings, which soon convinced me that the staff of management was quite capable of superintending a large mine. These workings consist of nine levels driven into the hill and sides from a creek, which has laid bare in section ore of the D.-D. B. workings, but merely to glance at the more important features, and especially upon those which show any light upon the value of your property.

Auriferous Banket.

Six of these levels are driven on the south side of the creek, and three on the north side. In all, a face of ore 600 feet long is exposed in section, or if we assume the creek to be an incline shaft, then we should express the workings in terms of an underlie shaft, 600 feet in depth. For this entire distance, ore varying in width from a few inches to 6 feet is visible, with a probable average of from 2 feet to 3 feet. The first 450 feet of ore is quite oxidised on the face, but from this point down it is very pyritic. A singular feature in connection with this mine is, that the ore at the entrance to the 480 feet and 580 feet levels, though eminently pyritic, and giving for the first few feet every indication of so continuing, suddenly becomes oxidised, and retains this condition throughout the length of the respective levels. The same feature of pyritic ore is exhibited at the mouth of the 200 feet level on the north side of the creek, and with a similar change to oxidised ore as the level proceeds, and now at the 180 feet there is the 3 feet of ore which shows no trace of pyrites in the pan, although its honeycomb appearance shows clearly that quantities of pyrites have at one time been present. Your property being on the north side of the creek I paid particular attention to the workings here, confining myself more especially to the examination of this 200 feet level, it, by its greater length, affording me more data than either of the remaining two.

I observed that at the entrance to the level the ore body had narrowed from 4 feet to as many inches in less than 30 feet; upon enquiry I was informed that opposite dips of the footwall are of quite common occurrence, and will sometimes pinch the ore out to very narrow dimensions, the ore coming in again in along the opposite dips. Proceeding along the level I found that the ore body was gradually increasing in width, and very large pebbles were making their appearance, whilst in places 12 inches of honeycomb matter without pebbles would be seen. The bed continued increasing in width, and at 65 feet from the mouth had reached a thickness of 3 feet 6 inches. This average thickness was well maintained throughout the level for a distance of 143 feet, when the ore is cut off by a dyke. I examined carefully the ore at or near the contact with the dyke, but could not see that it had suffered any loss, either in width or value. At the inner side of this dyke the beds have been downthrown a distance 18 feet. I next examined the ore near the dyke on its main side and found here, as on the outside, no marks of great disturbance, but on the contrary the bed well defined, 3 feet in thickness, and ore as good looking as anything I had seen in the mine. I examined right through to the end of the level, finally taking exhaustive samples right through the level and from the breast. I must record my satisfaction that here (distance 900 feet to Stanhope ground) at 180 feet from strike of dyke was as fine, if not the finest, ore body I had yet inspected. I next examined the levels on the south side of the creek, merely to give me an idea of the size and continuity of the beds, and my examination convinced me that there is no fault to find with either the one or the other. My next step was to take pannings from the different levels, ore faces, and heaps, paying more particular attention to the ore from the north side. As a whole the pannings far exceeded my expectations, that from the breast of the 200 feet level being a little the best, showing a large percentage of coarse gold, besides the fine.

Strongly impressed as I was with the Rand prejudice against these fields, the sight of the mine, and general operations, did much to take off the keen edge of the said feelings, but it remained for the panningo to entirely dissipate same. I may state that all my samples were taken, pounded in my presence, and panned by me, there being no director or interested party present during my operations, these gentlemen having particularly requested me to perform all such offices for myself, by which means I should be satisfied that the results I obtained were absolutely what I had taken of my own free will without influence or assistance from anyone interested.

I may here state generally that the mine, works, books, &c., were thrown entirely open to me to make what use of I cared to. Having satisfied myself that a highly payable ore existed in the D.-D. B. workings I turned my attention to gather what outside evidence I could of the extent of the gold-bearing ore. With this end in view I waited upon the manager of the Kambula block, which latter is situated in relatively the same position on the south side of the Mynpacht as is your ground on the north. The manager of the block under notice informed me that he had sunk a shaft 91 feet 6 inches and had passed through 5 feet 6 inches of banket; the lower 2 feet of this he estimated has yielded pannings of from 6 dwts. to 4 ounces per ton, and on the day I saw him he was highly pleased with washings from each point operated on, and of the ultimate success of his block as a payable gold-producer he entertains no doubt.

I next inspected and took samples from a small open cutting on the Golden Hill, adjoining the westerly boundary of your claims. Here I saw numerous pieces of ore showing visible gold, and the general appearance of the ore was very promising. Pannings made later proved that the results were as good as promised. This working is at least ½ a mile from the D.-D. B. Company's Mine. Two more points were now submitted for my notice, the one a bed 2 feet in width, the other 12 inches in width. The first is called the No. 1 bed, and underlies the No. 2 or main bed by about 65 feet. Between this and the No. 2 bed comes the smaller 12-inch bed. In each case the ore is highly oxidised, and pans payable, not to say richly.

Strike and Dips of Bed.

A computation made by the general manager, Mr. G. A. Denny, of the D.-D. B. Company, and myself, gives the strike of the beds as north 26° 43 minutes west, and the dip north 63° 17 minutes east, with an angle of 6°.

Approximate Tonnage and its Value.

In your 50-claim block, reckoning the width of reef 3 feet wide, you have 810,000 tons, and in the 13½ claims 144,642 tons, with an average yield from pannings from the D.-D. B. Company of 15 dwts., 80 per cent. of which can be extracted by milling and cyanide. This tonnage only includes the reef operated on in the D.-D. B. Company; in depth, I am of opinion that other reefs will be met with, of payable character, and that the one now operated on will improve as is the case on the Rand.

Proposed Method of Working.

I recommend your sinking a main vertical shaft in line of present one, but in centre of ground as marked on plan, 13 feet 6 inches by 6 feet within timber, the shaft to have three compartments, two of which for working of skips, and one for pump and ladder way, and to be timbered with 8 inch by 8 inch pitch pine; at the point of intersecting the reef sink on dip of reef, and open out levels every 100 feet; the reef being at so flat an angle, a modified method of coal-mining will be the best method to adopt. On this shaft a good substantial head-gear ought to be erected 50 feet high, the base work to be of pitch pine 10 inches by 10 inches and reared to a height sufficiently so as to allow grade for the ore from the bins of crusher and griddles to go to the mill. In front of the shaft erect your mill and cyanide plant, the falls being sufficient to handle the quartz cheaply. I would adopt tanks of sufficient dimensions to hold 300 tons of tailings, and have them built on pillars to allow of bottom discharge.

Machinery Required.

Having 954,600 tons approximately will give a 14 years' life for a 50-stamp mill, not reckoning more than one reef; I certainly recommend 50 stamps with heads of 950 lbs., which will crush 5600 tons per month, and a cyanide plant for the same amount. Other machinery, such as battery and hauling engines, electric plant for pumping and lighting, pumps, engineers' and assayers' appliances, will come on as required.

Approximate Cost for Full Equipment.

I estimate for the laying out of your mine so as to put you in a dividend-paying position, including shaft-sinking, all necessary houses, and all appliances, to be £30,000.

Approximate Yield of Gold Per Month.

You will crush at least, with 50 stamps, 5600 tons of an average yield, by fire assay, of 15 dwts. of which can be extracted by milling and cyanide, 80 per cent. which means a monthly output of 3360 ounces, which is equal to £11,760.

Approximate Monthly Profit.

The cost, including mining, milling, maintenance, general charges and development redemption, should not exceed 20s. per ton, which means a monthly expenditure of £5600, leaving you a profit of £6160, or 92 per cent. per annum on a capital of £80,000.

Water.

The D.-D. B. Company is constructing a large dam a little above their workings in the Creek, which when completed will hold some millions of gallons of water, sufficient to supply several companies, and I recommend to make terms with that company for the supply of water, until you form your own dam on your property by the tailings and debris from your workings at very little cost.

Conclusion.

It has been my duty and pleasure to set before you the result of my examination of this farm, and the same may be briefly summed up as follows:—

1st.—That on your property it has been proved that the banket formation of the D.-D. B. Company's mine strongly lives, for a distance of 15 or 20 miles, which distance I went over, and is gold-bearing.

2nd.—That on an adjoining mine after 10 days' constant and independent examination, I have formed such a favourable opinion as I never dared to anticipate.

3rd.—That having found on the said adjoining mine ore in payable quality and quantity, and your shaft the undoubted extension of the same ore body, I have no hesitation in predicting that the said ore body will be found on all parts of your property; and, judging from my experience at the Rand on identical formation, that the value will average practically the same as the ore at the mine in question.

4th.—That labour, both black and white, is 50 per cent. cheaper on these fields than at the Rand, which means the difference saved upon every ton milled. That the cost of general materials, steel, iron, timber, &c., is considerably less than at the Rand. The cost of dynamite, although at present higher, will soon be reduced by competition, when such is worth while. That an abundant water supply is obtainable at convenient distance, which with comparatively small expense can be pumped into the mill. I think you have a sound and very valuable property under option.

The new discovery near the Dead Finish, on the Murchison, is turning out beyond expectations. The discoverers have been on good gold all through the sinking. They recently struck a rich shoot that is said to surpass anything ever seen on the field.

THE MINERAL WEALTH OF COLOMBIA.

ABSTRACTS FROM OFFICIAL REPORTS.—A SUMMARY OF MINING LAW.

(*Concluded from page* 901.)

Panama and Darien.

DON DIEGO PORRAS, in his account of Columbus's fourth voyage, describes how in 1503 he entered the River Veraguas, where he enquired of the local Cacique as to the existence of mines of gold, whereupon the Indian chief gave him two of his sons to serve as guides.

When they arrived at the spot they found many mines which were being worked by the Indians. It was from the province of Veraguas that Columbus took the title still borne by one of his descendants.

From the date of their discovery down to the first years of the eighteenth century, these mines were worked with more or less success. At the height of their prosperity, in 1590, 2000 stout negroes were kept constantly occupied. Towards the end of the seventeenth century, work on a large scale had almost ceased, as the pearl fisheries in the Bay of Panama were found to afford larger profits with less labour and expenditure, and 50 years later, according to another authority, although the district was known to be extremely rich in gold, but little work was done, owing to the high cost of materials and provisions, which more than doubled in price after they had been brought through those rugged mountains on the backs of Indians.

The Darien district has been renowned for its wealth ever since the Conquest. The King of Spain gave orders that it should be called Golden Castile for its great abundance of gold. This district was peopled late, and it was not until about 1680 that the rich mines of Cana were discovered, followed by the working of the richest lode mine known to Colombia, the famous Esperitu Santo. For many years afterwards this district produced more gold than all the other provinces of the new kingdom of Granada put together. In 1708 the Cana mines gave 12,615 lbs. of gold; in 1712 there were eight alluvial mining districts, which found work for 40 companies of miners. This prosperity was not, however, of long duration, for the general rising of the Indians in 1726-27 struck the Cana mines a blow from which they never recovered.

Remaining Departments.

In comparison with the gold production of Antioquia, Cauca, Panama, and Tolima, that of the remaining five departments—viz., Bolivar, Cundimarca, Boyaca, Santander, and Magdalena, is almost insignificant, as the latter departments, from the first search for gold by the Spaniards towards the middle of the sixteenth century down to 1890, only furnished altogether $25,000,000, or scarcely 4 per cent. of the total output of $682,000,000.

In all these departments, however, at different times mines or placers of great productive powers have been discovered and worked.

Silver Mines.

The silver taken from the Colombian mines since their discovery soon after the Conquest does not amount to 6 per cent. of the value of the gold the country has produced. The reason for this fact is probably the imperfect knowledge possessed by the Spaniards of the scientific method of working vein-mines. Almost all the gold extracted at an early period came from alluvial deposits or from reefs that were so exceptionally rich as to facilitate their working by the most primitive methods. Such of the silver mines, therefore, as had veins near the surface were alone worked in Spanish times, as there was neither the capital nor the patience required to carry out undertakings that could only be made to pay after years of unremitting industry. With the exception of the mines of San Sebastian de la Plata, which gave promise of fabulous results, but turned out a complete disappointment, but few of the silver lodes found by the Spaniards were of more than average wealth. Nothing to compare to the Mexican mines, with their veins of an alleged thickness of 50 metres, has ever been found in Colombia, and it is only in modern times that the silver lodes in the country have been made to furnish any appreciable result. Down to the end of the eighteenth century all the silver extracted did not exceed $17,000,000. In the present century, although no silver mines were worked during the first quarter (up to 1840 scarcely anything was found, and up to 1860 not more than was worth $100,000), the amount extracted down to 1890 was $18,000,000.

In 1873 the production of silver began to increase rapidly; in 1884, thanks to the results obtained from the rich mines of the Supia and Mariquito district, it had risen to $1,250,000. Between 1885 and 1890 there was a falling off in the production, owing to the impoverishment of the mines of Marmato and Supia, but to judge from the exportation in 1891, and to judge by the information I have received from various quarters, the present production must at least equal that of 1884.

Platina.

According to Don Vicente Restrepo, this metal first began to attract attention in Europe in 1748. Before that date its presence had been observed by miners in the Choco and Barbacoas, but it was thrown aside as useless. As far back as 1720 the mode of separating it from gold by means of quicksilver was known in Popayan (Cauca).

It was ordered in 1778 that all platina should be sent to the Royal Treasury, but without remuneration. Ten years later $2 a pound was offered for it in the name of the king, and at the end of 1788 about 3820 lbs. of platina had been collected in the Choco.

The mines that then produced most platina were those of the River Opagado, a tributary of the Atrato. The low price paid by the Government led to its being sold to foreigners, who gave as much as $12 per lb. for it, and made fortunes by re-selling it in Europe.

At the beginning of the century Baron Humboldt wrote:—"Platina in grains is only found in two places in the known world—viz., in the Choco and Barbacoas. It is peculiar to certain sedimentary lands that cover a surface of 600 square leagues. The price of this metal on the spot is $8 or 40 fr. per pound, whilst in Paris it generally costs 130 fr. to 150 fr."

The present production of platina in the Choco may be estimated at $50,000 per annum, about two-thirds of which comes from the municipality of San Juan, as the Atrato contains but few mines, and their metal is of inferior quality.

The Choco platina is the purest and best sold in foreign markets, as it contains 80 per cent. to 85 per cent. of pure metal. Some time ago it fetched 650 fr. per kilo., but the price has now risen to 900 fr., or about £17 per lb., a rise in value due to the great use now made of it for the manufacture of industrial instruments and works of art.

Señor Restrepo, at the close of his chapter on platina, inserts a curious report addressed to the Viceroy Don Antonio Amar, in 1804, by Don Ventura Salzas Malibran, Lieutenant-Governor of the province of Atara. The author adduces arguments to prove that platina is in reality a kind of white gold.

General Conclusions.

After carefully considering the question, I have arrived at the conclusion that the gold and silver mines and perhaps the platina mines of Colombia may offer further profitable investments for British capital if the following conditions are complied with:—

1. That the mining laws be amended so as to protect miners against frivolous or fraudulent attempts to interfere with their property.

2. That investors exercise reasonable caution both at home and abroad, in examining the prospects offered by the mines it is proposed to work and in studying local conditions before incurring serious expenditure.

I would also venture to suggest that an improved organisation and a considerable extension of the mining schools of Colombia would contribute greatly to the progress of mining, and that friendly arrangements might advantageously be arrived at between the Government and foreign companies for the admittance into the more important mines of promising pupils from the special schools. Their knowledge of local conditions would be of value to the mineowners. Whilst, in return for their services, the student miners would enjoy opportunities for acquiring a practical knowledge of the latest improvements in mining processes.

NOTES ON THE PHILIPPINE ISLANDS.

By FRANK KARUTH, F.R.G.S.

V.

THESE notes will be brought to their end with a brief account of the Laws and Regulations in regard to Mining, and with a general review of the resources and the commerce of the Philippine Islands.

The Laws and Regulations now in force are those which were in operation in Spain until a few years ago. The unit of a Mining Concession in the Philippine Islands is a parallelogram 300 metres by 200 metres, occupying thus a superficial area of 6 hectares or approximately 15 English acres. A smaller block is not granted, except in the case explained further on.

To obtain a concession, an application has to be made to the Inspector-General of Mines in Manila, in which the boundaries of the proposed concession must be defined as accurately as possible. This application, when once filed and preliminarily granted, empowers the applicant to make search for minerals within the defined limits. After a specified time, a survey is made, and if the Inspector-General of Mines is satisfied with the value of the mineral indications, the concession is granted, if the ground applied for is not already occupied by another concession. That does sometimes happen, because there is no trigonometrical survey made as yet, and speculators are apt to place applications all round the spot where an interesting discovery has been made, or is supposed to have been made, the latter being more frequently the case. When granted, His Excellency the Governor-General causes a title of property to be issued, which, in its text, is a model of simplicity and clearness, whilst the attached plan and survey notes most effectively secure the position of the grantee. Foreign companies require to be registered in the Philippines, before acquiring the rights of a juridical person, which entitles them to own real property and mining concessions. In cases where unoccupied spaces of less area than one pertinencia between other concessions are required for mining purposes, they are granted to the concessionaires as "Demasias," and titles are issued to him accordingly.

Thus far, the acquisition of a mining concession by application does not involve an important expenditure. Naturally, in the case of "titled" mines, and such as are considered "proved" by the owner, who considers them so on the flimsiest evidence, vast prices and heavy cash deposits are demanded, but a little patience on the part of the intending purchaser is apt to bring exaggerated demands to their proper level.

The concession once granted, and the title issued, the proprietor has to pay a small fixed annual rental, and to do a certain amount of compulsory work on each "pertinencia"—or 15 English acres, which at present must be equal to 732 days' work, or at the current rate of wages to about £37.

Under a Royal Decree the "grouping" of mines is permitted—that is to say, a number of contiguous mines, which are worked as one concern, is termed a "group," and all the compulsory work due on the pertinencias forming such a group may be done on any one pertinencia. As a mater of fact, the Government and the Inspector-General of Mines, who is a gentleman of wide experience and rare scientific attainments, give every proof of their desire to foster legitimate and capitalised mining enterprise, and to baffle those adventurous mining rovers who take up concessions with the view, not of working them, but of selling them for a good consideration. There are many such rovers about, but whenever the Government steps in, they go out. It is in the nature of things, in such an extensive archipelago, that the Inspector-General of Mines cannot be everywhere, but he surely follows the legitimate enterprise, and administers the law without wavering. And in this he does not confine himself to purely mining matters, but also exercises his power in framing measures to prevent the theft of native gold from which the Philippines Mineral Syndicate has been from time to time a sufferer. At the expiration of the period of 30 years, for which a Royal Decree issued in 1867 granted immunity from duty or royalty on mine products, 3 per cent. will be payable on the gross value of the minerals raised. To sum up: As far as laws, regulations, taxes, royalties, and the attitude of the authorities are concerned, legitimate mining in the Philippine Islands has absolutely nothing to complain of.

Few outside the comparatively narrow circle, who are directly interested in the commerce and resources of the Philippine Islands, know anything of them. The Philippine merchants are a rather close community, which only in the last decade or so has expanded its diameter a little. There are a number of very old established firms amongst them, several of them being British. Thus a concern which was established in the year of the battle of Waterloo still stands to the front in its particular branch, whilst others in which generations of partners have amassed wealth—wealth in the British interpretation of the word—and gained rank and position in what is called "Society" in the British Isles, still maintain their high position and reputation. Amongst them also are firms, perhaps, as far as wealth and local influence go, the most important firms, whose chiefs are partly at least of the blood of the gentle race of natives, over whom Spain holds her sway.

In the old days money was made more easily than nowadays. It used, somehow, to flow into the merchants' coffers, without any particular effort in directing the flow on his part. But those times are no longer. Cables, weekly mails, and the influx of younger men with modern ideas have disturbed the somnolent complacency of the old times. And the fall in the value of the dollar has added its own particular bitterness to the trouble caused by the inroad of competitors, and by the equalisation of chances by the tale-telling cable. Nevertheless, the field is still a good one, and with the era of progress which seems to have set in in the Philippines, there will be room for many more.

A review of the commerce of the Philippine Islands shows a balance of trade in their favour. The trade in all commodities is open to all, the last State monopoly, that of tobacco, having been abandoned in 1883. There is a differential tariff in force in favour of Spanish manufactures, but that is about the only advantage which Spain obtains from her Philippine possessions, for the Spanish Treasury does not only *not* derive any profits from the Islands, but sometimes has to make disbursements on account of them.

In 1891 the Philippines exports to Spain amounted to	$22,479,000
In 1891 the Philippines imports from Spain amounted to	$17,126,000
In 1892 the Philippines exports to Great Britain amounted to	£ 2,130,915
In 1892 the Philippines imports from Great Britain amounted to	£ 725,981
The hemp export to Great Britain was of the value of	£ 1,216,048
The sugar export to Great Britain was of the value of	£ 829,300

The total exports from the Philippines in 1892 consisted of:—
95,016 tons of hemp,
3,951,060 piculs of sugar,
21,223 piculs of coffee,
61,459 piculs of Sampanwood,
5,570 piculs of Indigo,
254,428 quintals of tobacco-leaf,
137,059,000 cigars.

The total exports in 1892 were of the value of	$33,479,000
" imports " " "	$27,000,000

483 vessels of a total tonnage of 537,725, entered the Philippine ports in 1892. (243 with 303,065 tons under the British flag.)

471 vessels with a total tonnage of 525,069 cleared out in 1892. (283 with 290,053 tons under the British flag.)

Manila hemp is the fibre of a species of banana (*Musa textilis*) which thrives only in certain localities, where it is cultivated by the natives. The fibre is still produced in the old native way, by scraping the leaves with a peculiar knife, which requires expert handling. Numberless contrivances to supersede this simple process have been tried and patented, but without success. The native way is still the best, and it produces a fibre of a fineness, of which thread is spun and cloth woven that excels the best Tussore silk.

The manufacture of sugar is not carried on in a large way, but on small plantations, with antiquated machinery. There are a few large factories, but they are isolated. Some years ago an enterprising Australian established a central sugar factory, and laid down miles of pipes for the conveyance of the cane-juice to the boilers, and generally went to vast expense. The factory was there, and the engines with the most recent improvements, vacuum pans and what not; the only thing that was wanting, was the plantations to supply the juice. And thus the money was lost, and the pipes that were to conduct the cane-juice now convey limpid water to the inhabitants of Manila. It is an ill wind that blows nobody any good!

In closing these notes, the writer merely wishes to add, that well-directed energy and judiciously applied capital will bear good fruit in the Philippines; and the impetus now given to the Mining Industry cannot but assist the general forward movement in that interesting group of Islands in the Far East.

BRITISH GUIANA GOLD INDUSTRY.—The amount of gold entered at the Custom House, on the 25th July, for shipment by the R.M.S. *Dee* which sailed on the 26th ult., was 4989 ounces 3 dwts. 3 grains to the value of $88,883·92 an increase over the previous shipment of 3983 ounces 4 dwts. 9 grains to the value of $70,807. With this addition the total output for the year amounts to 67,959 ounces 19 dwts. 2 grains to the value of $1,195,217·55. The following is the return of gold entered at the office of the Department of Mines, for the week ending 21st July, 1894, and the amounts of royalty paid thereon:—

	Amounts. Ozs.	dwts.	grs.		Royalty. $	c.
Barima	580	5	21	....	522	24
Barama	5	13	14	....	5	09
Cuyuni	687	12	14	....	618	90
Puruni	30	1	6	....	27	06
Mazaruni	57	5	15	....	51	55
Conawarook	836	5	14	....	752	63
Essequebo	85	13	8	....	77	10
Potaro	872	14	20	....	785	46
Total	3155	12	4	....	2840	03

For the week ending July 28th:—

	Amounts. Ozs.	dwts.	grs.		Royalty. $	c.
Barima	165	8	23	....	148	90
Barama	69	18	17	....	62	98
Cuyuni	1222	14	1	....	1100	42
Groete Creek	6	8	1	....	5	76
Mazaruni	265	11	22	....	239	03
Essequebo	15	10	3	....	13	96
Potaro	521	2	4	....	469	00
Conawarook	436	19	17	....	393	30
Total	2703	13	16	....	2433	30

THE WENTWORTH MINES, N.S.W.—"The systematic development of the Wentworth Mines at Lucknow (N.S.W.), and the sufficiency of the surface equipments, are two matters which the management have constantly in view," says the *Australian Mining Standard*. "The new main shaft at the Reform Mine is down 760 feet, the greatest depth attained in any New South Wales gold mine; and at the bottom a very promising ore body has been struck. It is intended to open out another level at 800 feet, and drive for the contact (serpentine and diorite). This work is being done by contract; 12 men are engaged, and the cost is £5 10s. per foot. Machine drills, driven by compressed air, are used in sinking. In the mine, antimony ore is being obtained from Spicer's vein, and on the Uncle Tom's vein, 150 feet back from the contact, a curious formation—an indiscriminate mass of sulphides, free calcite, and quartz, carrying from 7 dwts. to 20 dwts. of gold, has been met with. Ore of a payable nature is coming from the stopes and winze in the lower levels; and in the intermediate drive, between the 300 feet and 400 feet levels, a good body of ore has been struck, giving free gold and pyrites of very high grade. In the Aladdin's Lamp a large body of low grade ore is being worked at the 200 feet level. At 300 feet they are rising on a brown vein, and at 500 feet prospecting is in operation by means of a diamond drill to find the rich Jackass vein. In the machinery shed and battery house a number of alterations have been made. The winding plant has been improved, and a Krupp ball mill erected, substantial poppet heads have been built at the shaft, tramways laid, and shoots constructed to the 10 stamp battery and the ball mill. Since the gutter was struck in the Amana a drive has been put in about 500 feet east and west along the course of the wash, and also put in a cross cut 80 feet to the south, and about 70 feet to the north. Good prospects have been obtained all along, the wash averaging about 2 feet. A trial crushing of 25 tons at the Aladdin battery gave 14 ounces gold. The ground is soft and easy to work; the reef is basalt."

MEETINGS OF MINING COMPANIES.

THE GOLCONDA GOLD MINES, LIMITED.

A fair amount of progress made.—Favourable reports on the mine.

THE first general (statutory) meeting of this company was held on Tuesday, at 14, Sherborne-lane, E.C., the offices of the company, Mr. ROBERT J. PRICE, M.P., presided.

Mr. JOHN MORISON (the secretary) having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen, this is, as you are aware, the statutory meeting, and we consequently have no accounts, and, the mine being such a very long distance from here, we have comparatively little information; but such as we have it will be my pleasure to put before you to-day. The date of the registration of the company was May 19, and we have held the statutory meeting thus early because we thought that although August 21 is not a very convenient time, it is, perhaps, a little more convenient than the first fortnight in September. The manager (Mr. Walker) went out immediately the company was registered, and consequently we have had the advantage of two or three letters from him, of the contents of which I will presently put you in possession; but perhaps the most important thing which has occurred since the formation of the company has been the wonderful unanimity of the reports which we hear everywhere of the excellence of this mine. I do not want to put it too high, but there really has been a remarkable unanimity as regards the value of our Golconda property. I see in the newspapers that officials have recently been interviewed who spoke very favourably indeed of the West Australian gold fields, and there seems to be a strong idea that the discovery of gold in West Australia is going to lead to the removal of that depression of trade from which we have suffered so long, in which case I presume that we, who are more or less pioneers of this enterprise, may regard ourselves as universal philanthropists. Universal philanthrophy is an excellent thing; but, on the whole, perhaps some of us would prefer a kind of philanthrophy that does some good to No. 1. I remember a story of a man who, in talking about the greatest good of the greatest number, said he thought the greatest number was No. 1. It is a very admirable thing if you can combine philanthropy and business, and, with regard to those general terms, I will go a little further, and will talk about our own mine. I referred to the fact that all the information was good, and perhaps some of you will think of the text, "Woe unto you when all men shall speak well of you." I hope it is not going to be woe with us. I am inclined to think the only reason that was said was that when good things are spoken of men they are apt to fold their hands and stand still. I hope we shall not stand still. I will tell you what we have heard from outside sources. I have heard nothing unfavourable; everything I have heard has been good. Here is one instance. It is from a friend of a member of our board. This gentleman says:—"The Golconda, which I hear is just floated in London, is, or appears to be, real good. I was there a few days ago; they were just on water level, and any amount of gold visible and beautiful specimens on top, just turned previous to dollying. It carries a good reef, almost 800 tons ready for crushing and any amount in sight." In a financial paper of 22nd May, 1894, there was published the following:—"A private letter, received by the mail which arrived in London yesterday, from a mining engineer now in Western Australia, but in no way connected with or interested in the property, contains the following reference to the Golconda Mine:—'I think it will be found that the Murchison gold field will be the more permanent field of the two now to the front. One of the best properties in the Murchison is undoubtedly the Mainland Consolidated Mine, situated on the mainland, about 16 miles from Coe, and 4½ miles from Austin Island. The mainland abuts on Lake Austin, Austin Island is a very rich auriferous county; it is on this island that the famous Golconda Mine is situated. I was at the Golconda Mine, and took in my hands a piece of stone weighing about 60 lbs., and it was estimated that the piece of stone contained over 100 ounces of gold. The Golconda Mine is a very valuable property, with a good strong reef running right through the property.'" Mr. Fitzgerald Moore, a mining engineer from Victoria, in his report on the Murchison district, says:—"I went on to the island in Lake Austin, and was shown around several claims there. The mine, which contains the richest specimens and a large reef as well, is known as the Golconda. I have seen stone there which is valued at £400 the cubic foot, and there is said to be plenty of it. The reef proper averages from 3 feet to 4 feet, and the stone outside, from which the rich specimens have been obtained, will probably average 2 ounces to the ton. The rich specimens are found in large blocks running down to the water. There are several fine properties on the island which are yet in their infancy." Only yesterday one of the directors met a friend who told him that he thought of all the mines the Golconda was the best. We have received from our manager information that the transfer of the property has been completed, and we now know from the bank that the titles were in order. In a recent communication the manager said:—"A fair amount of progress has been made in sinking and driving. The deep shaft has been continued on the underlie to water level to a vertical depth of about 55 feet. Some of the best stone ever got was raised from here. They have taken the shaft down on the hanging wall, and estimate the total width of the reef to be 11 feet. In the side 4 feet from the wall there is some very coarse gold showing, and I was informed this also showed in the bottom under water. One or two pieces of pure gold stood out of the stone for half an inch. The other drives and shafts are nearly connected at both levels, and a further distance driven to the south of 28 feet. There is a break in the reef in this face, but the walls are well defined, and quartz is again coming in. We know the reef is ahead. From several hurried panningsI estimate the mullock from this break, taken 5 feet wide, will go well over an ounce, and is very easy crushing stuff. In all other parts we have solid quartz showing increased width with depth. Estimating by the eye there are 800 tons of ore at grass. I had no time to prospect, but the men say there is no change in quality. No stoping has been done, and no driving further to the north." There seems to be no doubt about the quantity of water, because at 55 feet we have struck water in the mine, and there appears to be any quantity of salt water below the surface. We heard extraordinary stories of over 40 per cent. of solid matter in the water, and being very anxious on the point, we telegraphed to the manager to have the water analysed. The reply we received from him was:—"Have received your cablegram of the 13th (July); 10 ounces solids (to) gallon, mostly salt. I visited other mines in the locality to help me to form an opinion. The adjacent mine works well the amalgamation process. Mailed samples. Send us soon as possible pumps." That is very satisfactory to us, and this telegram relieves us of all fear. We are sending out a very complete distilling plant. As was stated in the prospectus, Mr. Walker went out as the first manager, but we found that he was not willing to be the permanent manager; indeed, he had made arrangements with other parties, which made it almost impossible that he could be the permanent manager of the mine; so we looked about and found a man who, in our view, will be a first-rate substitute. He has had an enormous amount of experience, and we interviewed him on several occasions, and put him through searching cross-examinations of every kind, and I believe we have in Mr. Benson a first-class permanent manager. Mr. Walker will still continue to give us the benefit of his assistance and advice, though we have not yet decided whether he will be consulting engineer or a local director. We have ordered first-class plant and machinery. I think, perhaps, we should have begun a little more tentatively if we had not been compelled by our contract to erect within a certain time a battery equivalent to 10 stamps; but, as the contract was so, we proceeded to loyally carry it out, in order that there might be no dispute in the future. Our machinery is being pushed on with all rapidity, and will be despatched some time within two or three weeks from now, and the whole of it, I hope, within eight or ten weeks. With regard to railways, I cannot give you any definite information when the line to Coe will be made. All we know is that almost every official who speaks in West Australia talks of it as being one of the first things in the Government programme. When the interests of the colony are so intimately bound up as they are with railway extension, and bringing these rich gold fields into communication with the coast, and the encouragement of immigration, I think you may take it that the lines will be constructed as soon as the wherewithal is forthcoming. We have at present, as wood-fuel, scrub, within reasonable distance from the property, enough to keep us going for a considerable time, and before that is exhausted the probabilities are that we shall have supplies of coal from the port. The West Australian gold field is a great gold field, and I hope that the Golconda Gold Mining Company in a year or two will have shown its claim to be considered one of the very best of those gold mines.

The CHAIRMAN, in reply to Mr. Major, said there was plenty of water. It was merely a question of quality.

Mr. F. A. THOMPSON, one of the directors, said that on the mainland, which was situated about a mile from this, they were getting fresh water at 120 feet. If they could handle a large quantity of fresh water in the mine it would save the expense of distillation, and be much more beneficial for amalgamation purposes. He did not apprehend that the water difficulty would be anything very serious, because the cost of pumping the water when the plant was in position was not great, especially where that water could be utilised for milling purposes. They proposed, if possible, to place the battery immediately adjoining the shaft, so that there would be no need to transfer the ore to the mill, thereby reducing the cost of pumping.

Mr. MAJOR asked how far the mine was from the shore of the lake.

Mr. THOMPSON thought a quarter of a mile at the nearest point, but the outcrop of the reef was about 120 feet above the level of the lake.

The CHAIRMAN, in reply to SHAREHOLDERS, said that as soon as they had the stamps out there they should crush all they could. Up to that time they would treat all they could by dollying. They might take it that the 800 tons, which was lying at grass, did not show a great deal of visible gold. When a piece showed visible gold they generally dollied it, and turned it into bullion as soon as they could. Their idea was that the 800 tons would yield about 4 or 5 ounces to the ton. There had been a certain amount of dollying since the mine became the property of the company. They did not quite know the results yet.

Mr. THOMPSON said they were sending out as many duplicate parts of the machinery as possible, so that there should be no delay in case of accident.

Mr. LEY enquired what was the greatest depth to which the shaft had been sunk.

The CHAIRMAN said the shaft was now down 55 feet, and they had reached the water. They would not sink further until they had the pumps, but they would probably drive on the 47 feet level. They hoped the pumps would be at the mine within three or four months.

Mr. LEY proposed a vote of thanks to the Chairman for the very lucid way in which he had explained the prospects of the company to the shareholders, and he thought they would all agreed that they were, as far as they had gone, most favourable.

The motion was duly seconded, and unanimously agreed to, and the meeting ended.

WEST AUSTRALIAN GOLD CONCESSIONS, LIMITED.

Acquisition of a property adjoining Bayley's Reward Claim.

The statutory meeting of the above company was held at the offices, 33, Old Broad-street, E.C., on Tuesday, Mr. E. D. OPPERT presiding.

The SECRETARY (Mr. Alfred Aylard) having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen, you are aware of the fact that this meeting is called in accordance with the statute, and that we have to meet our shareholders within four months after the registration of the company. We have anticipated that time by about a month, because we feel we have something to say to our shareholders which will probably rejoice their hearts. The company, as you are aware, was formed for two specific purposes. The first was to take over a concession from the West Australian Land Company for prospecting rights for about 3,000,000 acres of its territory, which it had acquired from the Government of Western Australia, and in consideration of its building the Great Southern Railway of Australia. Shortly after the concession was obtained some discoveries of gold were made on the adjoining land, and in the immediate proximity of our property. The second object for which the company was formed was this: Amongst your board there are two persons—Mr. Wiseman, a director of the Hampton Lands and Railway Company, who had been connected with Western Australia for a number of years, and myself—who foresaw that the gold discoveries in Western Australia would lead to a good deal of speculation—speculation that probably we should not approve of—and our intention was to form this company, partly with the view of dealing direct in Western Australia, by means of a representative, with options that we might obtain, thus securing to the company the full benefit of any purchases which might be made without the interference of middlemen. The very first thing we had to do after the company was formed was to secure the services of a gentleman of what I call multifarious capabilities. We wanted a man who was, first of all, a mining expert; secondly, a man who was, to a certain extent, a diplomatist—that is, one whom we could entrust with the negotiations in Western Australia with the view of obtaining properties first hand, and also, if possible, a man who knew Australia, and particularly Western Australia. We cast about for a considerable time, and it was with some difficulty that we secured the services of Mr. Ellam, who, I think we shall find, combines all these qualities. We have secured his services at what I may be allowed to call a very reasonable rate of pay. While we were negotiating with Mr. Ellam we met with a rare piece of good luck. A gentleman who had just arrived from Western Australia was introduced to me. He offered me various properties, and it seemed to me that he had something else, to use a vulgar expression, up his sleeve. I asked him whether he had not got some other property, and he told me he had, but that he had only just received particulars of it, and that his right to deal with it expired in two or three days. I asked him for particulars of the property, and I found that this was a property immediately adjoining the Bayley's Reward Gold Mining Company (Limited). I ascertained the particulars from him, and the terms generally appeared to me so moderate that I immediately sent round for my fellow directors, and we then and there decided to acquire the property. Within 24 hours after the property was offered to us we had the satisfaction of cabling out the deposit, with very strict injunctions to the bank to only pay over that deposit against the deposit of certificate of title. We also made it a condition that the property should be reported upon by some eminent mining expert in Western Australia—not a man who merely called himself a mining engineer, but a man on whose report we could thoroughly rely. I am happy to say that this property has been reported upon by, probably, the most eminent man in Western Australia, namely, the manager of the Bayley's Reward Gold Mining Company, and his report is so very satisfactory that I believe we have secured what is really a gold mine—possibly as good as that of the Bayley's Reward Gold Mining Company. Through the kindness and courtesy of Mr. Oakes (the late Registrar of the Coolgardie Gold Fields), who may be willing to say a few words to the meeting by-and-bye, I have been favoured with a map of the Bayley's Reward Gold Mining Company on a large scale, also showing the property which we have acquired. It is a map drawn up by no one who has the slightest interest in the property we have acquired, and it shows that what they call the northern part of Bayley's Reef runs from end to end through our property. If that is the case, as we all believe, I think we have acquired a property which may be found to be second to none in the Coolgardie district. We have instructed Mr. Ellam, immediately on his return, to proceed to Coolgardie, to see that the labour conditions on this property are thoroughly carried out, and to report to the directors privately his opinion as to the value of the property. I think I may say a few words with regard to the Bayley's Reward Gold Mining Company, as we are double neighbours. I see from the *Financial News* to-day that, under the management of Mr. Matthews, whose report and whose highly-favourable opinion of our property we have obtained, it has raised within 13 months the sum of £234,000 in gold, and has actually paid dividends up to the present time amounting to between £80,000 and £90,000, and that within about 12 months. The capital of the Bayley's Reward Gold Mining Company, with an area very little exceeding ours, is £480,000, and the shares are very nearly par. Within the last week we had the good fortune to acquire on even more moderate terms a property adjoining ours, and also adjoining the Bayley's Reward Gold Mining Company. We do not know that there is gold on that property. The price that we are giving for it is really the price for the land, and even if there should be no gold on it—and we believe there is—we shall have made a good purchase. I am bound to say that we have not finally acquired the second property, because we have not cabled out the total amount of the deposit wanted, which amounted to half the purchase-money; but we are in expectation of hearing almost any day that the smaller deposit has been accepted. You will, of course, agree with me that it is not desirable to tell the world the exact prices which we have paid for those properties. The prices are very low. They are such that I have not the slightest doubt we could sell the first of the two at a price many times larger than what we have given for it—in fact, a suggestion has already been made to me with the view to selling it; but I do not think the directors will consent to that. I have nothing more to communicate to you, except to say that, as the directors have from the first done their very best in the interests of the shareholders, they will continue to do so, and they hope that under their guardianship the company—which, with a very small share capital, has undertaken a very big business, and which possesses a concession of prospecting larger than that of any company either in England or West Australia—will assume a position of considerable magnitude in the colony. (Applause.)

Replying to Mr. W. WREFORD, the CHAIRMAN said that if any more preference shares were issued, they would not be issued at par except to existing shareholders; at least that was his personal feeling in the matter. He thought those who had been the first to invest their money in the concern ought to have first benefits from the good fortune of the company. (Hear, hear.)

Mr. WREFORD remarked that as the ordinary shares were at a considerable premium, it would scarcely be fair to let them get into alien hands.

Mr. OAKES, in the course of some remarks, said he had been on the field almost from the commencement, and, therefore, was acquainted with the property which the company possessed. He believed their title to the property would be perfectly clear, and that was a very essential point. The vendor had a clear title, which was not always the case, and the property itself adjoined Bayley's. He believed that if any real work were done on the property, they would strike something really good. He wished the company every success, and promised to do something towards helping it on his return to the field. (Applause.)

The CHAIRMAN stated that the board had received a cablegram from the manager of the Bayley's Reward Gold Mining Company, in which he said:—"Shaft sunk, south-west portion, exposing lode 5 feet thick, with 18 inches solid stone, showing good gold lode underlying east, making rapidly more in property as depth attained." When Mr. Matthews, who was a careful man, spoke of good gold, he probably meant something exceedingly good.

Mr. CREWE proposed a vote of thanks to the Chairman and his colleagues, which was unanimously carried.

SOUTH AFRICAN TRUST AND FINANCE COMPANY (LIMITED).—A meeting of large shareholders of the South African Trust and Finance Company (Limited) was held on Tuesday at the offices, 1, Crosby-square.—Mr. B. B. Trench, who presided, said the first question to be decided was whether it was desirable for the Press to be present. This was only a conference between the board and certain shareholders whose opinion the directors were anxious to obtain before they took a step which naturally fell upon them to take alone, without any consultation whatever with the shareholders; but owing to the agitation and the arrangements which had been entered into in connection with the formation of a committee, it was considered desirable by his colleagues that, before they took this step, they should have the opinion of the shareholders. That was the business, and he wanted the opinion of those present as to whether the reporters should remain or not. He wished, before he took a vote on the question, to announce that he had received from Mrs. Bensley a letter which stated that owing to the short notice given of the meeting, and in consequence of other engagements, the writer would be unable to attend, so she had requested Major Cotton, or certain other shareholders, whom she named, to represent her. Of course, remarked the Chairman, there was no objection to Major Cotton, who came within the form of the notice which had been issued, and who had a large interest in the company, but the other gentlemen had a very small interest in the undertaking, and as the meeting should be constituted of those who had been summoned, he would ask the other gentlemen named in the letter to abstain from voting on this question.—Mr. Concanon did not wish in the slightest that they should have any row or any unpleasantness on that occasion. His stake was, like the Major's, very large, and it was not to their interest to have any unpleasantness. The largest shareholders had been called together to confer with the directors, and they were not going to take a vote that would bind the whole body of shareholders upon a specific subject, a subject of intense delicacy, this being the question of change of management in South Africa. He failed to see how it could be desirable to have published abroad what had been the negotiations with Mr. Campbell, the acting manager, under notice, or Mr. Allan, the gentleman the Chairman was going to suggest should be appointed——Major Cotton: You seem to know a great deal about it.—Mr. Concanon: You came and told me a lot about it.—Major Cotton said he was against any "hole and corner" meetings. He for one was dead against this sort of thing. Some time ago he wanted the large shareholders to be consulted on a certain matter, and the Chairman said it was not the right thing to do, and that a man who had 50 shares had as much right to an opinion on the question as any other shareholder, and he refused to allow it. "Am I not right, Mr. Boyle?" asked the Major.—Mr. Boyle: I think you are right.—Major Cotton: And now the Chairman, as it suits him, says something else. He sometimes blows hot and sometimes blows cold. Perhaps he finds some of the larger shareholders are his supporters, and have given him their votes. I say, "Let us have the main body of the shareholders if there is anything to discuss, and let us have no 'hole and corner' meetings." I am ashamed of nothing, and I am sorry if there is anything that you are ashamed of.—Mr. Doré moved, and Mr. Skelton seconded, that the representatives of the Press be requested to leave the meeting.—Major Cotton asked if he and the other shareholders might be furnished with a transcript of the shorthand notes which would be taken of the meeting, but the Chairman said that matter must be decided after the question before the meeting had been disposed of.—The motion was carried, and the reporters withdrew. We understand that the proceedings lasted about an hour and a-half, and that the meeting ultimately passed a resolution proposed by the Chairman, and seconded by Mr. Concanon, that a telegram be sent to Mr. Raw, authorising him to terminate Mr. Campbell's engagement

with the company on the best terms he could arrange; and that Mr. Robert Allan be sent out as general manager, at a salary of £3000 per annum. A wish was expressed that Mr. Raw would reconsider his decision to resign his seat as a director.—Sir Stuart Hogg spoke of the valuable services of Mr. Lionel Boyle, the London manager, and proposed that, as a temporary measure, he should be sent out to Johannesburg, to work in concert with Mr. Campbell. This proposal was seconded by Major Cotton, but it did not meet with the approval of the meeting.

WEST KITTY MINE.

Profit, £1050.—Dividend of 3s. per share.

A 16-weeks' meeting of adventurers in West Kitty was held on the mine on Tuesday, Mr. JOHN B. REYNOLDS presiding. There was, as usual, a large attendance of shareholders.

The accounts showed the expenditure to have been £3756, including labour costs, £3359; dues and rents, £258; St. Agnes parish rates, £104; bankers' charges, £33. The receipts amounted to £4807, and included 107 tons of tin sold at an average price of £43 5s. 9d. per ton, £4655; south section capital account for water charges, £93; Wheal Friendly Mine Company, for drawing and water charges, £31; discounts, £25; and sale of old materials, £2. This left a profit on the 16 weeks' working of £1050, and a balance in favour of the adventurers of £1424. There are no liabilities due and unpaid. An appendix to the statement showed—Agency, £159; tutwork (driving, rising, sinking, and stoping), £819; tribute, £350; engine work, £119; smithery and carpentery, £85; carriage of coals, tin, &c., £219; sundry work, £216; tin dressing, £426; doctor, £28; club, £12; merchants' and other bills, £921.

A separate account for the south section was attached to the ordinary accounts. This showed receipts, £3012: including call of 10s. per share on the 6000 shares of the company (made May 31st, 1894), £3000; and discounts from merchants, £12. On the other side, the labour costs have been £1370; contribution to West Kitty water charges, £93; bankers' charges, £2; leaving a balance of cash at the bankers of £1546. There are no liabilities due and unpaid. The appendix to this account was as follows:—Sundry work, £124; capstaning, &c., £84; merchants' and other bills, £1161; (engine and boiler, including carriage, £313; repairs to engine, £83; pitwork, £295; steam pipes, lifters, &c., £74; engine and winding gear, £150; timber and cement, £94; compensation to Captain R. Davies, £50; engine house stone, and roofing, £40; explosives and sundry bills, £60.)

The report of the agents was as follows:—

> The 108 west is worth for tin £7 per fathom. The rise in back of the 108, £8. The 94 west £3 per fathom. The winze in the bottom of the 94 £7. The 84 west £12. The 60 east south of slide £12. The 60 west south of slide £10. The rise in back of the 60 £10 per fathom.—Stopes: Two stopes in the back of the 90 are worth £14 per fathom each. Four stopes in back of the 84 £11 per fathom each. The stope in bottom of the 70 £17 per fathom. The stope in back of the 70 £13 per fathom. The stope in bottom of the 60 £18 per fathom. Two stopes in back of the 30 £11 per fathom each. We have 26 men working on tribute varying from 4s. 6d. to 13s. 4d. in the £. Since the last meeting we have changed our pitwork from the 70 fathom level to the adit; everything is working satisfactorily. We have commenced to build the engine house at Thomas's shaft, also let the men a contract to cut down and divide the shaft to the adit. The engine for drawing the stuff from this shaft is on the mine, and will be ready for working in a few days. We have driven east on the course of the lode at the 60 fathom level south of slide about 30 fathoms, and driven west about 20 fathoms. The rise in back of the 60 fathom level is up 9 fathoms. When the rise is up 12 fathoms we shall commence to drive east and west at that point. We have opened up a large piece of tin ground south of slide.—JOEL HOOPER, JOHN WILLIAMS.

The CHAIRMAN said: Gentlemen, there are on the table the bankbooks of the company, the cost sheets, and vouchers, and the list of the shareholders, all of which are open for the inspection of the proprietors. And, gentlemen, I am very glad indeed to tell you that I have nothing but good news for you to-day. (Applause.) I do not think anything in connection with the company admits of even adverse criticism. (Hear, hear.) The officials have done their duty well, the committee have worked hard, and all have proved by the results that they have done their very best in your interest. (Applause.) You will observe, by looking at the statements of accounts, that we have made, not exactly a new departure in this company, for we do not act without precedent, but you will observe that we have two statements here. The one statement deals with the call of 10s. per share which the shareholders made upon themselves, and the other statement is the current account, showing really the profit and loss items. Now, dealing with what we have called, for the sake of distinction, the south section capital account, you will find that every farthing of the call—the second instalment of which was only due on the 31st of last month has been paid. (Applause.) That is a wonderful result, and, as far as I know, unprecedented in the history of Cornish mining. I am very glad it has been so cheerfully responded to, because it shows that the shareholders that are not in the habit of attending our meetings have perfect confidence in those shareholders who are able to attend our 16 weeks' gatherings. (Applause.) Now, you will observe that we have spent out of this £3000 a considerable amount, and you will see that we have debited the south section account with the sum of £93—that is, the estimated cost of the extra coal which we have been obliged to burn since the discovery in the south section. You will also observe that we have paid for the engine and boiler—the engine is a very excellent one, and so is the boiler—including carriage, £313 10s.; repairs to engine, £83 1s. 6d.; pitwork, £295 0s. 8d.; steam pipes, lifters, &c., £74 13s. 10d.; engine and winding gear, £150; timber and cement, £94 7s. 10d.; compensation to Captain R. Davies, £50; and we were obliged to agree to this latter amount, because putting up this engine at Thomas's shaft was right at the back of his premises on his property, and he was entitled to the money, and no one, I am sure, will object to the sum. (Applause.) Then there is £40 for engine house stone and roofing, and £60 6s. 2d. for explosives and sundry bills. That is how the money which has been paid away out of the £3000 has been spent. Now, our hope is that the balance will carry us down with the shaft nearly to the West Kitty lode, and when we get the West Kitty lode in Thomas's shaft you will find, I think, that we shall lay open very soon after that one of the richest mines we have ever yet seen in the parish of St. Agnes. (Loud applause.) You will see that on this capital account there are no liabilities due and unpaid. (Applause.) That is a rule in our office to which we strictly adhere. With regard to the other statement, you will observe that we have sold a very considerable extra quantity of tin during the last four months, and shareholders will wish to be satisfied that that tin has been fairly taken away. I have questioned our exceKent agents on the matter, and they assure me that it has been in conformity with the fair working of the mine; and they assure me, moreover, that they have discovered during the last four months more tin than they have brought to surface. (Applause.) That is a very satisfactory statement, gentlemen, and I wish you to cheer it. (Loud applause.) Now, the net profit during the last four months has been, you will see, £1050—(applause)—and that amounts to a 3s. 6d. dividend; but the committee are strongly of opinion that we should content ourselves, and I quite agree, with a dividend of 3s., and that we carry forward the £150 to our credit balance, increasing our credit balance on our ordinary current account by that amount. (Applause.) I do not know that there is anything else calling for attention in these accounts; but if any shareholder has any question to ask concerning them I shall be glad to answer such questions. (Hear, hear.) The agents' report is, as usual, very matter of fact, and very clear; but the agents have not told you, gentlemen, what I think, perhaps you will be interested to know—that the additional ground we have acquired extends south of the crosscut 250 fathoms in length on the course of the lode, and that is an enormous stretch of ground, and 100 to the east of the crosscut, and to the west 150 fathoms; so that you will see we have in this south section practically a new, and I have no doubt whatever, a very valuable possession. (Applause.) We have paid already £110,000 in dividends. (Applause.) I have declared them myself from this chair, and have signed cheques for the whole of the amount, and I fully expect that we shall declare as large an amount, supposing we have the same average price for tin, from this south section. (Applause.) I see no reason whatever to doubt it. (Applause.) There are employed on our property, 136 men, 37 boys, and 15 girls. The total quantity of tin sold by this company has been 4203 tons, and the amount this tin has realised has been £243,228. (Applause.) It is indeed a magnificent result One cannot say more than that; but if this is the result of working mines judiciously and earnestly in this district, I only hope that many more will be set to work before long. (Loud applause.) There is a question which I wish to direct your special attention to, and that is to the encroachment by our friends on the other side—Wheal Kitty—on our mineral rights. The shareholders will be glad to know that there is every disposition on both sides to settle this matter amicably—(applause)—without resort to legal proceedings; and I trust that the negotiations, which I may say are now contemplated, if not going on, will result in a very satisfactory settlement. (Applause.) The amount is not killing. It would be very welcome to us, but still it would not hurt our good friends on the other side, on whom we now look as a rich company, and we very heartily congratulate them. (Applause.) Then there is another matter which I have to bring before the shareholders, and it is this. When the committee applied for an additional lot of ground they thought it wise to procure as much as they possibly could, so they not only secured the ground of which I have already spoken, but they have secured an additional piece of ground, which for some time belonged to the New Kitty Company, which company, as you know, wound up. That company was wound up, I am sorry to say, under a complete misapprehension, and we did not find it out until it was too late to remedy the evil. But, at the same time, the committee thought, if possible, the New Kitty shareholders should be remembered in case that was started by a separate company to work that piece of ground. Now, we communicated with the lords, and they insisted that, although they were quite willing to grant that piece of ground upon which New Kitty engine now stands—although they were quite ready to grant that—they would only grant it on two conditions, the first of which was that it was to be worked as a separate company; and, secondly, that the West Kitty shareholders should have the first offer of the shares. (Applause.) Well, gentlemen, we could only agree to that, for they were very resolute, and when we form that separate company, it is proposed to offer these shares, in the first instance, to the West Kitty shareholders. (Applause.) I have no doubt many West Kitty shareholders will not care to increase their liability in mining, and in that case, whatever shares are left will be offered *pro rata* to the New Kitty shareholders, whom we must remember as far as we possibly can, in order that they may get back, if possible, all the money they have lost. (Applause.) I think that will commend itself to your judgment, and directly I shall have a resolution to submit to you on that subject. Then, with regard to the tin market, I will say nothing, because you have had such valuable opinions—opinions from gentlemen who know a great deal more than I do on the subject, and whose opinions are much more valuable than mine. Speaking for myself, and myself only, I have no doubt of the accuracy of the forecast I made in this room eight months ago, when I said I had no doubt a very favourable turn would come, and that a considerable rise in tin would take place. (Applause.) I was of the same opinion when I urged your committee to curtail the output, and I think you will admit that I was right in my calculations. (Hear, hear.) Tin is now rising—rising rapidly—and I think that before we are four months older from now we shall have a further rise of more than £10 a ton. You will see for yourselves whether I am right or not. It is only an opinion I have formed on what I consider to be very correct basis, and all I can say is that I trust I am not sanguine enough in that forecast. (Applause.) I do not know that there is any other matter with which I need trouble you. I have spoken perhaps at too great length. ("No.") I am rather unwell now, and it is with some difficulty that I preside over this meeting, but one of the most pleasant and agreeable meetings I attend is this meeting, and it would be a great disappointment to me if by any chance I was prevented from seeing you every four months. (Applause.) I will now propose "That the statements of account and agents' report be and are hereby received and adopted," and I shall be glad if an outside shareholder will second it.

Mr. HEARD said he had great pleasure in rising to second the proposal, and for this reason, that he had every confidence in the accounts of that mine. He had felt very strongly for many years past that the word "no debt" meant "no danger;" and, therefore, he had always great pleasure in remembering that it was the rule in that mine to have no credit. (Applause.) Their Chairman had mentioned about an encroachment on the part of the adjoining mine—Wheal Kitty; but as far as the committee of Wheal Kitty were concerned, they knew nothing of any encroachment, and the matter was never brought under their notice until they received a lawyer's letter. Anything in the way of a friendly arrangement would be adopted by Wheal Kitty. (Applause.) To go to law and hear lawyers contending with each other four or five or six days as to the merits or demerits of a line of demarcation 200 or 300 fathoms beneath the ground, was a position he hoped they would never occupy. (Applause.) He thought it would be well for the agents of both mines to confer with each other, and also the committees; and if they could not agree, then let them take the opinion of an expert, whose decision they should abide by. (Applause.) They had only one object in view—to work their mines in a reasonable manner; and he was only too pleased to hear that a new mine had been found in the south section. On the other side of the river they too had, comparatively speaking, almost a new mine—(applause)—and for that locality these mines would be a great boon, and it was the duty of them all to do all they could to forward the interests of these mines. (Applause.)

The motion was carried.

Mr. HEARD: Does this new sett extend to Gooninnis?

The CHAIRMAN: No; Gooninnis is to the south of Wheal Kitty.

Mr. HEARD: Has that sett been acquired by anyone?

The CHAIRMAN: Yes, an independent grant.

Mr. HEARD: What are you paying for coals here?

Captain WILLIAMS: 14s. 2d. per ton at the wharf.

Mr. HEARD: And then you have to pay the carriage?

Captain WILLIAMS: Yes; 1s. 3d.

Mr. HEARD: Do you import your own coal?

Captain WILLIAMS: No.

Mr. HEARD: You are satisfied with the quality?

Captain WILLIAMS: Perfectly satisfied.

Mr. HEARD added that he felt very strongly in regard to the encroachment, and he hoped negotiations of an amicable and satisfactory nature would result in the boundaries of the sett of each mine being adjusted at the earliest possible moment. (Applause)

Captain HOOPER said he was very pleased with the remarks made by his friend, Mr. Heard, respecting the agents at Wheal Kitty, and he could say they in West Kitty had always been on the most friendly terms with them. (Applause.) The Chairman had given them general particulars with regard to the mine and the working of the mine, and he had no doubt that the shareholders were acquainted with the fact that in cutting the lode in the south cross cut they let down a great deal of water, and in consequence they had to put in larger pitwork, and do other work, which they anticipated would take them a fortnight to do. They built a dam in the south crosscourse to keep back that water in order not to get their mine full. They started the work on Monday morning, and on the Friday night week they started their engine again. (Applause.) They were at it night and day, and he was pleased to say they had no mishap. (Applause.) Before changing the pitwork they sent sufficient stuff to surface in order to keep the stamps going, and during the whole time they were enabled to keep all the hands at work. It was thought at one time that they would fall short of their usual quantity of tin; but they had increased the quantity from 95 tons last time to 107 tons this. (Applause.) They had not in any way rushed the mine, but had worked it fairly, and everything had turned out well. But they were sorry for one thing—that tin was at so low a figure. Instead of selling at £60 a ton, they had been obliged to sell a lot at £41 15s., and that was the highest figure at that particular day's ticketing. In driving the 84 they had driven through a long piece of good tinny ground, but they had not done much to that, only opened a few fathoms during the time of the change of the pitwork. They had a lode there at the present time worth £12 a fathom. They were driving that back in what they might say was whole ground going west. It had been said over and over again that the western part of the mine was done, but this was not so. (Applause.) They were sinking a winze at the 94 to rise in the back of the 108. They were doing that for ventilation, and they would have there a good bit of ground for tributing. Coming back to the south part, Captain Hooper added that he doubted whether Wheal Kitty would have found the lode had not West Kitty found it where they had. They had driven east on the course of the lode at the 60 south of the slide about 30 fathoms, and driven west about 20 fathoms. The rise in the back of the 60 was up 9 fathoms. In course of time, they calculated they would have a mine there that would last for a great number of years, and they believed that as they went on, they would continue to find new shoots of tin. (Hear, hear.)

Captain WILLIAMS said he quite endorsed all that Captain Hooper had said. With regard to the north part of the mine, it was by no means exhausted. In the 84 west they had opened up there about 20 fathoms of good tin ground, and there was a large amount of tin ground to be worked on tribute and tutwork. But as regarded the south part of the mine, he thought that would be the mine of the future. In the eastern end the lode was 6 or 7 feet high. It was a very promising lode, and they had something like 60 or 70 fathoms to the eastern boundary. He saw no reason whatever why the south part should not turn out as good as the north. In reference to the quantity of tin returned last time, they had not forced the mine in any shape or form; but one or two stopes and tribute pitches improved a little. They had encouraged tributing this last year and a half, and they were now tributing in the two bottom levels. He saw no reason why they should not keep up their returns during the next 16 weeks. (Applause.) They had made provision for four additional heads at their stamps, and they would be fixed in the next 16 weeks and set to work. (Applause.) That would give them one-seventh more stamping power. (Hear, hear.) The principal part of the mine was to the south of the slide. They had commenced to cut down Thomas's shaft from the surface to the adit, and they were now down about 18 or 20 fathoms. They had made provision for a double skiproad, cleared out the foundation for pumping engine; also they had got a winding engine on the mine fixed, and this would be ready for drawing in a day or two. (Applause.) In 10 days or a fortnight they would be in working order in that part of the mine, and then they would go on without any intermittance until they got to the 60 fathom level, where he hoped they would open upa valuable piece of tin ground. (Applause.) They were opening up a splendid property in West Kitty, and there was, in his opinion, no better speculation in Cornwall to-day than West Kitty shares. (Applause.)

In reply to Mr. GAIT, Captain WILLIAMS said they had a splendid lode in the west end 5 feet wide.

Mr. HEARD was very pleased to hear the agents say they intended to do all they could to encourage tributing. (Applause.) He believed tributing in many mines was not encouraged as it should be. (Hear, hear.)

Mr. F. W. MICHELL being asked to speak as to the machinery, said they had ample power for everything for years to come, excepting for stamping. The addition that would be made to their stamps would give them one-seventh more stamping power, but that would not meet the case, and they would, he thought, have to go in for more stamping power before another 12 months had gone by.

The CHAIRMAN: We are very pleased to hear it. (Applause.) That is a very good sign.

Mr. MICHELL added that they were working very cheaply and very well. They had not only got a very fine section above the slide, but they had got a good piece of ground below the slide going west. (Applause.)

The Rev. W. M. LENNOX, in the absence of Mr. Budd, through indisposition, proposed "That a dividend of 3s. per share (free of income-tax) on the 600 shares of this company be and is hereby declared, payable forthwith." When he said they had made this dividend on 107 tons of tin, sold 'at an average price of £43 5s. 9d. a ton, and the profit had been £1050 19s., they would see that West Kitty managers had done a very good stroke of business for the shareholders, and they might congratulate the agents on the energy they had put forth in the accomplishment of this. (Applause.) The shares were estimated in the paper to be worth 5½, but he would like to see the man who could buy them for 6½. (Hear, hear.) If they had £60 for black tin, they would have made 8s. or 9s. per share dividend, and had tin been £80 a ton—well, then they would have been congratulating each other on the big dividend they would have received. (Applause.) However, 3s. per share was a very fair dividend, and on visiting the mine that morning he was pleased to note that there was every indication of prosperity. He congratulated the shareholders in West Kitty on their possession of such a splendid property. (Applause.)

Mr. J. J. GAIT had great pleasure in seconding the resolution, remarking that if they had an increase of £20 a ton in the price of tin they would that day have been able to declare a 10s. dividend. He was pleased to hear the remarks which had been made in reference to the misunderstanding, or whatever it was, between Wheal and West Kitty, and he sincerely trusted it would be settled in an amicable and kindly way. (Applause.)

Mr. BAWDEN proposed "That the best thanks of the meeting be and are hereby presented to the committee of management for their past services, and that the following do constitute such committee until the next general meeting of the company, viz.:—Messrs. G. Budd, J. J. Gait, W. M. Lennox, W. H. P. Martin, J.P., F. W. Michell, and John B. Reynolds." These, added Mr. Bawden, were names which had been without exception connected with West Kitty for a considerable time, and it was no idle compliment to pass a vote of thanks to those gentlemen who had so ably assisted in the welfare of that mine. (Applause.)

Dr. WHITWORTH seconded, remarking that West Kitty was the model mine of the county, and this was, no doubt, due in a large measure to the committee of management and the agents for the way they looked after the affairs of the mine. (Applause.)

Mr. C. TWITE supported, eulogising the committee and the agents on their successful management of West Kitty.

The motion was unanimously carried, and the CHAIRMAN briefly acknowledged the compliment.

The CHAIRMAN then proposed—"That the committee of management be authorised to take such steps as they may deem needful for the prompt settlement of the encroachment and water questions as between this company and Wheal Kitty."

Captain NANCARROW seconded, and took occasion to highly compliment the agents on the manner in which they were working West Kitty.

The CHAIRMAN moved the following resolution:—

> That with reference to the sett known as Polbreen, which has been granted to Messrs. Lennox, Michell, and Reynolds, with the proviso that a separate company be formed to work it (the shares in which separate company are to be in the first instance offered to the West Kitty shareholders *pro rata*) it is hereby resolved that the West Kitty committee be requested to act in the formation of such new company, at such time and in such manner as they may determine, and that in the meantime the committee be empowered to make such advances for leases, cost, and machinery, as may be necessary (such advances, however, not to exceed the total sum of £200), and to be repaid by the new company to West Kitty Company, when such new company is formed.

The CHAIRMAN added that the committee intended to start this new company as soon as they thought it judicious to do so.

Mr. ISAAC ROWSE seconded the motion, which was unanimously adopted.

The CHAIRMAN said he had still one more pleasing duty to perform, and that was to propose "That the best thanks of this meeting be presented to the agents—Captains Joel Hooper and John Williams—for the admirably exceptional manner in which they have discharged their duties during the past four months, and also to Mr. F. W. Michell for the great diligence he has displayed in the interests

of the company." He was sure this resolution would be carried with enthusiasm. (Loud applause.)

Mr. N. B. Bullen seconded, remarking that he had been a witness of the hard work the agents had done, and they richly deserved the hearty thanks of the shareholders. (Loud applause.)

The Rev. W. M. Lennox having supported, the resolution was carried with loud applause, and the Agents briefly replied.

On the motion of Mr. Isaac Rowse, seconded by Mr. Lennox, a hearty vote of thanks was passed to Mr. Reynolds for presiding, and the meeting concluded.

THE DINNER.

The shareholders, to the number of over 60, subsequently dined together in the Oddfellows' Hall, Mr. Paull catering admirably. Several toasts followed, the Chairman giving "Success to West Kitty," observing that he hoped the returns during the next four months would be kept up, and he had no doubt they would be so; that all they wanted was a little better price for tin to meet in 16 weeks' time under more favourable conditions. These were his expectations, and he hoped if they were not fulfilled, they would not be too hard upon him. On the last occasion, he predicted that a dividend would be declared at that account, and though some of his friends laughed at the idea, they had had a substantial dividend that day—(applause)—and had been able to add £150 to their credit balance, which now stood at £525 about. That was a substantial amount, and then they had to the credit of the capital account something like £1546; so that they had a rich mine, well equipped with machinery, and £2000 in their pockets. He thought, therefore, they were very well off—better off to-day than they had ever been before. (Applause.)

The toast was drunk with much enthusiasm, and Captains Hooper Williams, and Mr. Michell briefly replied.

"The Committee" was proposed by Mr. Isaac Rowse, and replied to by the Rev. W. M. Lennox.

The Chairman then gave "The Press," remarking that Mr. Heard had done more to promote the cash system in Cornish mining than any other living man. (Loud applause.) He knew very well Mr. Heard, in his endeavour to do so, had vexed many persons. That was inevitable. But he had gone straight on in what he (the Chairman) considered the path of duty, and when they reflected on the lamentable proceedings with respect to Wheal Uny they must admit that Mr. Heard had every possible justification. (Applause.) He was not saying, or even hinting, that any blame attached to any particular individual in Wheal Uny; but he did say this, that it was the duty of shareholders to look into their own affairs, and to see to it that the business in which they were concerned was conducted properly. (Applause.) He was always very pleased to find shareholders not only interesting themselves by attending the various meetings and asking questions if necessary, but he was also glad to see them coming to the office and making enquiries and looking through the books, so that they might know exactly where they were in point of liability. (Applause.) That was the conduct which paid best in every way. It established that confidence without which it was impossible to conduct mining business properly. Mr. Heard had also gone in for no secrecy in connection with their mining companies, and he (the Chairman) thought that this was right. (Applause.) Let everything be open and above board. The things they feared to bring forth to light must be, at any rate, questionable. If everything was right, why not let everything be known—(applause)—and they might depend upon it where everything was right, everything was known. (Loud applause.) Whenever they found things withheld from the knowledge of shareholders, let them take care. There was danger ahead as sure as they were living men. (Applause.) He could pledge them this on behalf of the committees of the mines in his office, and on his own behalf, that at 37, Walbrook, there was no secrecy. (Applause.) There was a full disclosure of facts, as had been presented to them to-day. This policy had been supported by Mr. Heard, as much as by any other living man. (Applause.) He (the Chairman), for one, was thankful to Mr. Heard. (Applause.) He wished him, with all his heart, Godspeed and a long and prosperous life. (Loud applause.)

The toast having been heartily drunk,

Mr. Heard responded. Most of them knew he was not a stranger to St. Agnes. (Applause.) He had known the parish for 65 years and more, and he was deeply interested in that locality, and he would say this without fear of being challenged by anyone, that no man living had done more for that district than had Mr. Reynolds. (Applause.) Through evil and good report, he had stuck to West Kitty, and he had got around him a noble body of adventurers, who had also remained staunch supporters of West Kitty to that day. The report was, he considered, a most satisfactory one, and with regard to the system Mr. Reynolds espoused, it was the system worthy of imitation. (Applause.) Having alluded to the lamentable catastrophe which overtook Wheal Uny, Mr. Heard said he was going to follow the example of Mr. Reynolds. He did not impute to any one or two men the fault of Wheal Uny; but he did say any business conducted as Wheal Uny had been, could only result in dire calamity. He was in communication a short time since with one of the shareholders in Wheal Uny, and he found that though that shareholder had paid every farthing of the calls as they came due, in the hope that Wheal Uny would turn the corner, he retained 600 shares, and had been called upon to pay £1200, and was now called upon to pay another call of £1000—between £2000 and £3000 in calls after the mine was wound up. He deeply regretted that a Cornish mine should be so conducted, and that such fearful calls had to be made. Mr. Heard concluded by wishing Mr. Reynolds as much success in Trevaunance and Polberro as he had experienced in West Kitty, and added that everyone in that parish would heartily congratulate him on such a result. (Applause).

"The Bankers" were next proposed from the chair, and replied to by Mr. Bawden.

Mr. Heard gave "The Health of Mr. Reynolds" in complimentary terms, and the toast was received with much enthusiasm.

Mr. Reynolds briefly replied, and the proceedings concluded.

MAWSON'S "REWARD" CLAIM, LIMITED.

The New El Dorado in Western Australia.—The question of the permanency of the reefs.—Mr. Thompson speaks hopefully of the company's prospects.

The first general meeting of this company was held at Winchester House, Old Broad-street, E.C., on Thursday last, Mr. F. A. Thompson presiding.

Mr. Allen H. P. Stonham (manager and secretary) having read the notice convening the meeting,

The Chairman said: Gentlemen, as you are aware from the notice, this is the statutory meeting of the company, which we are compelled to hold within four months of its registration, and as no accounts fall to be presented, there is little business to be done, and the holding of the meeting is, therefore, merely formal, and in compliance with the Companies' Acts, under which we, as a company, exist. It will, no doubt, be of interest to you, however, to know that after many delays, which, under existing circumstances, have been unavoidable, but which have, nevertheless, been very annoying to your directors, we have at last succeeded in securing the transfer of the property to the company, and the title and possession is now vested in the company, and we are performing the necessary preliminary work, preparatory to pushing the active development work with all possible rapidity. Your directors have, after careful investigation of the credentials of many candidates for the position, secured the services of Mr. Arthur R. Browne, F.G.S., M.A.I.M.E., an experienced mining engineer, to act in the capacity of mining manager, under instructions from the board in London. Mr. Browne, who is now in charge of affairs upon the mine, in addition to having received a thorough technical education as a mining engineer and metallurgist, at Freiburg and other mining schools, has also had several years of practical mining experience in various positions of trust upon the mines of Tasmania and South Australia, and is therefore familiar, not only with the duties of his position as manager, but with the climate and circumstances surrounding the mining industry in these colonies as well, many of which will be found to be similar to those existing in Western Australia, the new Eldorado. Your directors, therefore, feel that they have been fortunate in securing his services in that capacity, and that being acquainted with many of the difficulties attending the development of your property, situate as it is in a new and somewhat isolated district, your interests as shareholders could not have been placed in the hands of a better or more competent man. You must quite understand, however, that proper and economical mining development work can only be proceeded with at a certain pace, and while your directors and manager at the mine will spare no effort to hasten the productive stage of your property to the earliest possible date, consistent with proper economy, you must, therefore, possess your souls in patience while this development work is being done, and your property is being suitably equipped. Plans and details as to the machinery to be ordered have been most carefully arranged by our consulting engineers, Messrs. Bewick, Moreing and Co., and only await the arrival of some necessary information from Mr. Browne before placing the same. I may state that information at hand from the mine since the company was organised confirms the original reports upon the property as to its value, which reports I may add were made by Government officials to the Government, and not for the purposes of vendors, and there is every reason for believing that as soon as a sufficient amount of development work can be performed, and hoisting and crushing machinery erected, they will be verified in the most substantial manner by such returns from the ore treated as will prove to be entirely satisfactory to you. A letter from Mr. Austin, dated Albany, June 13, 1894, states: "Mr. Mawson is just back from the mine, and expresses himself as well pleased with the appearance and prospects, and the work that has been done. They have employed a really good practical miner (C. Mason), and he has been tunnelling from a point near the southern boundary to cut the reef at about 65 feet. This tunnel is timbered, and has a trolley line, and it will open up about 24,000 tons of stone, which can be got for 2s. 6d. a ton, and Mason considers this stone will go 4 ounces per ton." Mr. La Page, one of the directors of the company, at present in Western Australia, and who rendered valuable assistance in securing transfer to the company, writing from Perth, on July 20, says: "I hear from several people who have seen Mawson's property that it is a good thing—in fact, very good, and Mr. H. P. Woodward, the Government geologist, tells me he considers it a most promising mine." As this is the first mining company organised in England for the working of West Australian mines, it may not be amiss to call your attention to some of the facts connected with the mining industry of this colony, with which to the extent of your subscription to the capital of this company you have become identified. While it is an admitted fact that during the last seven or eight years a certain amount of gold has been produced from this colony, yet not until July of last year was information regarding the existence of these reefs and of this production of such a character as to receive any response from English capitalists, but I learn now that the books at Somerset House already show that over £1,000,000 of English capital has been registered by the various companies organised for the acquiring and working of West Australian mining properties. The latest information received by Sir Malcolm Fraser, Agent-General for Western Australia, is to the effect that the gold export from that colony for the 12 months ended June 30 last amounted to 147,411 ounces, as against 72,564 ounces for the corresponding period of 1893. Consequent upon the introduction of a new field in connection with gold mining, a great deal has been, and is being, said regarding the difficulties connected with mining in this colony, and it has been remarked by some that they are so great as to render the industry unprofitable, and sneering remarks have been made by others against the permanency of the reefs found in these new districts. But I must confess I do not attach much importance to either proposition for the reason that as to the former, while not for a moment attempting to deny that certain difficulties do at the present time exist, delaying development and rendering the working of the mines more expensive than would otherwise be the case. Although connected with the mining industry in different parts of the world for nearly 15 years, I have never yet known of the discovery of a new mining district of any value, the development of which was not associated with difficulties to be met and obstacles to be overcome. While admitting the existence of difficulties in connection with the early working of the mines found in these new fields, I by no means consider them of such an insurmountable character as some would wish to believe. Similar and equally grave ones have been met and successfully coped with in South Africa and other parts of the world, and I am positive they will be in West Australia, with equal and perhaps more successful results. It has occurred to me, however, that those in control of the Government of West Australia have not in the past put forward much effort to overcome or lessen these difficulties, and that the officials have not up to the present time seemed to appreciate or to attach the importance to these discoveries which their intrinsic merits really warrant, nor have they appreciated the influence the rapid and successful development of this industry has and will have upon other important industries of the colony, which by this means will receive that support so necessary to their existence and progressive development. No more striking illustration of the beneficial results arising from a rapid development of so important an industry as mining to a colony like West Australia, can be made than by reference to Johannesburg, where to-day the mining and other industries dependent upon it, and which, less than 10 years ago were practically unknown there, support over 50,000 people, and has been the direct or indirect means of developing the resources of that country to an extent scarcely deemed possible when these discoveries were first made. Nor could better evidence of the apparent lack of this appreciation, or of enterprise on the part of these officials be asked for, than the fact that such important districts as Coolgardie, Murchison, and Dundas have been allowed to exist so long without telegraphic and railway communication, so especially necessary in connection with the development of the mining industry, and this in view of the fact that no serious engineering difficulties exist, and in the face of repeated offers of funds necessary to construct the same on what should be considered business terms. I am pleased to be able to say, however, that recently these officials seem to have partially roused to the situation, and become aware of the importance of these enterprises, and the bearing these railway extensions will have upon the investment of foreign capital in the colony, and by their recent public utterances have virtually pledged the Government to the immediate and rapid construction of the same—which promises on their part, we have every reason to believe, are sincere and will be carried out with all possible speed. You will be gratified to know that while Mr. Browne, our new manager, was in Perth, on his way to the mine, he, together with Mr. Saunders, and Mr. La Page, obtained from the Government a grant of £500, to be expended in developing water for the Dundas district, from which it will be seen that the Government is well disposed towards those investing money in colonial enterprise and in developing its resources. In this connection the shareholders of this company, and all others interested in the colony and its progress, are to be congratulated upon the recent election of the Hon. H. J. Saunders, our colleague upon the board of this company, to a seat in the Legislative Council of Western Australia. There is probably no one person in the colony more deeply interested in the mining industry than he, and I doubt if there is anyone who has put forward more earnest personal endeavour, or accomplished more in drawing the attention of capital to the fields than has Mr. Saunders. His election can, therefore, be considered a fit recognition of his services in advancing these important interests of the colony, and from our knowledge of him in the past, we can safely rely upon him continuing his efforts, on the other side and in the interests of progression, whenever occasion arises. As to the latter proposition, the permanancy of the reefs, as Sir Malcolm Fraser so tersely put it in his recent interview: "The present generation need not trouble about their permanency." Yet as you are aware, there are always those to be found who never see any good in a discovery or proposition unless made by themselves, while others, who may be interested in other mining districts, are sufficiently narrow-minded to believe they are promoting their own interests by condemning those of others in which they are not interested, without other reason. It may be within the knowledge of some of you, it certainly is within mine, that many so-called experts unequivocally condemned the Banket reefs of the Witwatersrandt district in the Transvaal, designating them as mere surface deposits that would not extend in depth to exceed 100 feet, while pluck and enterprise has proved their existence and payable character to a depth of over 2000 feet, and demonstrated them to be the largest and most continuous auriferous deposits the world has ever seen, and which are, in my opinion, destined to be eclipsed only by those of Western Australia. Others seek to compare the West Australian reefs with those of the African district mentioned, and to detract from their value by comparison in size. This would not injure the latter colony if they are fair and just in their comparison, but they are evidently unfair in the making of these comparisons either through ignorance of the real facts, or by wilful mis-statements. Anyone thoroughly acquainted with the reefs at Johannesburg, will, I think, confirm my statement that admitting their striking uniformity in size and value, they cannot be considered rich reefs, nor can the producing reefs be considered large ones, as the fact exists that the richer reef of the series known as the south reef does not exceed an average width throughout the district of 20 inches, and will not exceed an average value of 30 dwts. per ton. While the main reef, the much larger of the series, is in rare instances rich enough to be worked by itself alone, and only a comparatively small portion of the milling operations of the dividend-paying companies is supplied from this sources. Taking all the surrounding circumstances into consideration, it is found from the returns made during a period of one year, that the average working results per ton for 84 South African companies, after the heavy capital expenditure in development and equipment, is as nearly as possible as follows, viz.:—Average value of ore produced 14 dwts., or representing a cash value of £2 7s. 5d., the average cost of production being £1 11s., leaving a net profit of 16s. 5d. From which it will be seen that to maintain the small margin of profit realised from even the extensive workings of these companies requires the most careful and intelligent administration, and speaks volumes as to the ability of those in charge of and responsible for the work. On the other hand, while the development work upon the reefs thus far discovered and worked in West Australia (in a number of instances to a depth of over 200 feet), and from the most reliable data obtainable, establishes their average thickness to be over 4 feet, and while actual milling results have not yet been sufficient to warrant any positive statement as to their average value when worked extensively, yet, from a careful study of the milling results and other tests thus far made, I am of opinion that after excluding such excessively rich finds as Bayley's Reward, Londonderry, and the more recently reported discovery north of Coolgardie, the average results of crushings from genuine properties upon known and proved lines of reef, in large quantities, will exceed 2 ounces of gold per ton, and when properly developed, equipped, intelligently and economically managed, the cost of production from such properties will be so well within the value of the gold produced as to yield handsome profits upon the capital invested. And, further, I have no hesitation in saying that from present indications your property, the Mawson's Reward, should, and undoubtedly will, stand foremost among the dividend-payers of these districts, and that you can rely upon the utmost endeavour on the part of your directors and officials to hasten as fast as possible this important event, and to maintain this position when once established. In conclusion, I cannot do better than to again quote from the recent remarks of Sir Malcom Fraser, where he says, "The gold discovery in Western Australia is neither a secret nor a trick. Every day will show the world that it is one of the wonderful realities of the century." And in my humble opinion West Australia will prove to be the Eldorado of the world (Cheers.)

Mr. Wyatt complimented the Chairman on departing from the dry routine of statutory meetings, and giving the shareholders such a comprehensive account of the mine and its surroundings. He had no doubt that the directors would keep the shareholders equally well informed during its development.

The Chairman: We shall try to.

Mr. Moreing made a few remarks at the request of the Chairman. He said he came there more as a shareholder than as the company's consulting engineer. He had been waiting before going into his special department to hear from Mr. Browne, the manager, as to various points which it was necessary for him to know before he could safely design and send out the machinery for crushing. He had just heard that news had come from Mr. Browne to the effect that he was very much satisfied with the property, and probably in a few days they would be hearing from him the necessary details to enable them to design suitable machinery. It would be very rash to send out to West Australia a mill without having it designed for the peculiar conditions of the country. He thought the directors had been very wise in waiting and developing the mine while suitable machinery was being made. Directors were generally too keen to send out machinery, which very often lay by the wayside. Here the mine was being developed, and when the machinery went out they knew it would be suitable, and that they would get good results. He complimented the Chairman on the speech he had delivered and the valuable notes he had given about West Australia, and the general characteristic of the reefs there. He (Mr. Moreing) was one of those engineers who had from the first given a great deal of attention to this West Australian gold field, and following it up as he had done, and being possessed probably of more reliable and authentic expert information than anybody else in London, it certainly seemed to him that they had undoubtedly in West Australia gold fields of enormous extent, eclipsing any previous discoveries in any part of the world. The recent discoveries in West Australia put in the shade the Californian excitement on the Pacific Coast, and there was not the glamour and astonishing richness about anything in South Africa that there was about these discoveries in West Australia, where veins 5 feet wide were found, half of them being solid gold in many cases. These were not fabulous stories; they were absolute facts ascertained from reliable men and Government officials. Lately the discoverers of these veins, before they had known them a few days, had taken out £30,000 or £40,000 in gold, and that only with the pestel and mortar. It is stated that these veins were from 5 to 6 feet wide, giving 70 to 80 ounces to the ton. These things seemed incredible, but they were well authenticated, and, therefore, he certainly thought that they were on the eve of a gold development in West Australia, which would eclipse anything they had yet seen. Experts used to talk as if all the gold-producing countries of the world had been more or less examined or exhausted, but here they were apparently on the eve of one of the most extraordinary and gigantic discoveries of gold ever made. He was certainly very pleased with the little property which this company possessed, and he hoped it might be a very valuable and profitable mine, as all appearances tended to show. Neither he nor any member of his firm had yet seen the property. They really took it up upon the opinion of the Government geologist in Western Australia, who was a man of absolute integrity. He certainly thought, from the news received from Mr. Browne, which was eminently satisfactory, that they were not going to be disappointed. The necessary machinery would be sent out shortly.

Replying to a Shareholder, Mr. Moreing stated that after receiving the necessary details it would take three months to manufacture the machinery in England, and probably another three months to send it out.

The Chairman: In the meantime the development work of the mine is going on.

On the motion of Mr. Nevill, seconded by Mr. Swinborne, a vote of thanks was accorded to the Chairman and the proceedings then terminated.

THE IRON AND STEEL INSTITUTE.

MEETING AT BRUSSELS.

THE Iron and Steel Institute held its autumn meeting this year at Brussels. On Monday evening last there was a conversazione and reception in the Hotel de Ville by the civil authorities; on Tuesday the first meeting for the reading and discussing of papers took place. The chair was occupied by the PRESIDENT (Mr. E. Windsor Richards), who was supported by Sir Lowthian Bell, F.R.S., Professor Roberts-Austen, C.B., F.R.S., Mr. E. B. Martin, Mr. James Riley, Mr. G. J. Snelus, F.R.S., Mr. William Whitwell, Mr. Arthur Cooper, Mr. David Evans, Mr. David Dale, and Mr. A. T. Walker. There were also on the platform Professor A. Gillon and M. Briart, the Chairman and Vice-Chairman respectively of the local reception committee, as well as a number of the members of that committee. There was a very full attendance of members.

M. GILLON cordially welcomed the Iron and Steel Institute to Belgium on the occasion of their second visit.

The PRESIDENT then thanked M. Gillon and the local reception committee in the name of the Institute, assuring them that the previous visit to Belgium had left many pleasant memories, and that the present one afforded a valued opportunity of renewing old friendships and of making new ones.

The minutes of the last meeting were then read by the SECRETARY (Mr. Bennett H. Brough).

The Mining Industry of Belgium.

The first paper read was on "The Mining Industry of Belgium," by M. A. Briart, President of the Society of Engineers of Hainault. Having dealt briefly upon the history of the industry, the author gave a geological sketch of the coal fields, remarking that the coal system comprises the greater part of the thickness of the carboniferous formation of Belgium. It forms the upper portion, the carboniferous limestone lying at the base.

The Belgian Coal Field and the Classification of the Coals.

The coal field covers a narrow belt from the east to the west of Belgium. Its maximum breadth along the outcrop reaches 15 kilometres (9·3 miles) towards Charleroi. It traverses the whole country, connecting on one side with the coal fields of Aix-la-Chapelle and of Westphalia, and on the other side with those of the Nord and the Pas-de-Calais. This belt is not continuous as it is broken, although but slightly, in the province of Namur by an upheaval of the carboniferous limestone.

The following is the section of the coal measures as accepted by the Belgian Geological Survey:—

Coal Measures properly so-called (H_2).

H_2—Sandstone, greywacke, and shales; various coals, Lower Coal Series (H_1).

H_1c—Conglomerate, grit.

H_1b—Felspathic sandstone, greywacke, schists, encrinital limestone, lean and slaty coal.

H_1a—Flinty slate and siliceous schists, cannel, without coal.

The lower coal measures (H_1) should correspond with the millstone grit and the gannister beds in England, and with the Flötzleeren sandstone of the Rhenish provinces. The thickness in Hainaut is estimated at 400 to 500 metres. It only contains several beds of coal of such nature that the working is limited.

The upper coal measures, properly so-called (H_2), are the only series which can truly be called productive. It contains the numerous seams of coal which are so extensively worked in Liége, Namur, and Hainaut. It is in the Mons district that the thickness of the coal measures is most considerable and that the number of the seams is the greatest. According to Mr. G. Arnould Director-General of Mines, this number is at least 125 for a thickness of 2160 metres of coal-bearing strata.

The basin of the centre of Hainaut and of Charleroi contains about 75 workable seams; that of Liége contains scarcely more than 60.

In Hainaut the total thickness of coal can be reckoned at 70 metres, which corresponds to 3·23 metres per 100 metres of the strata, and, allowing 125 beds, to a mean thickness of 0·56 metre. The thickest seam does not exceed 1·70 metre (5½ feet of coal, and the thinnest is as low as 0·27 metre (10 inches).

The rocks enclosing the coal are somewhat difficult to support in the workings. This necessitates heavy expense for timbering, and a considerable cost for maintenance. This, in connection with the medium thickness of the seams, necessitates the extraction of a large amount of useless material, which forms the numerous and immense waste heaps that are to be seen on all sides in our coal-producing country, a sight that is never seen on such a large scale in any foreign coal field. This dead work frequently amounts to and sometimes exceeds a third of the amount of coal won.

The coal may be classed, according to their chemical composition, under the four following heads:—

1. Flénu coals suitable for the manufacture of illuminating gas. They contain from 25 to 42 per cent. of volatile matter. They are produced more particularly in the Mons coal field.

2. Bituminous coal suitable for the manufacture of coke for metallurgical purposes. They contain from 17 to 29 per cent. of volatile matter.

3. Semi-bituminous coals suitable for domestic use, and only giving an imperfectly coherent coke. They contain from 10 to 17 per cent. of volatile matter.

4. Lean or short-flaming coal, of which the upper beds are equally suitable for domestic use, whilst the lower beds are especially sought after for burning bricks and lime. They contain less than 10 per cent. of volatile matter.

In spite of several anomalies, it is perfectly easy to recognise that the decrease of the volatile matters corresponds with the increasing depth at which the beds are found in the series, a law already recognised in Belgium, as it has been in the coal basins of other countries. In addition, it is known that in the same bed the percentage of volatile matters decreases slightly and proportionately to the depth, and that the power of agglomeration in the coke decreases equally in depth with the same quantity of volatile matters.

Geological Irregularities.

Of all the coal fields known at the present time, it is incontestable that that in our country has suffered most from geological action. It was scarcely formed before it was subjected to attack. Since then an ebbing movement from south to north appeared; and, during a period of which the duration cannot be defined, carried our seams from the horizontal position in which they were laid down into the perturbed and dislocated state in which we see them to-day. The result of these monoclinic bends, more or less extended, at angles often very acute in the form of an inverted V towards the north, is that all the edges, whether inclined or horizontal, generally trend towards the south. A remarkable exception to this rule occurs at Mons, where the great flat beds of Flénu, which form the main source of wealth of the country, trend to the north.

Numerous faults have also been the result of this great movement of the earth's crust. Nearly all trend towards the south; some of them nearly horizontally. With some exceptions, they continue in an upward direction from the roof over the wall for sometimes several hundred metres of amplitude. These great faults, in certain cases, have been the cause of erroneous ideas of the richness of the coal field, and have given the impression of a series of distinct beds, in place of a repetition of the deposit.

The long continued movement of southern ebb has brought above our coal-bearing rocks, towards the southern boundary of the basin, *lambeaux de poussu*, or disintegrated matter, formed from the more ancient rock masses of Lower Carboniferous Devonian, and even of Silurian age. They seemed for a long time to be an obvious contradiction of the most firmly established geological theories. If these phenomena are studied attentively, it is found that this debris, sometimes resting almost isolated in the middle of the carboniferous area, in consequence of later denudation, is in contact with it on a slight southern inclination; but that this soon flattens, and raises itself on the north towards the surface, to limit the extent of the debris on that side. On this account, workings sometimes extend to very great distances under these heaps, in beds of which the indications show sufficiently that there could be no immediate relation between them. These troubles chiefly occur in Hainaut, where we have the *lambeaux de poussû* of Boussu, of Fontaine-l'Evêque-Londelies, and of Souffioules.

The same movement, from the south towards the north, at last completed its work by the producing the Southern fault *(Faille du midi)*. This great geological accident, which runs almost uninterruptedly from the Pas-de-Calais to the province of Liége, has brought in contact, in places where there is no ebb-deposit, and in again covering them along a but slightly inclined plane of transport, the beds of the Lower Devonian (old red sandstone) with the carboniferous series. This fault put an end to the period of dislocation in our subsoil. Since then our country only seems to have been subjected to movements of elevation and depression as a whole, in such a way that even if the motion has given rise to new features, they have been of but little importance.

Overlying or Barren Strata.

This description would not be complete unless I mentioned the overlying or barren strata. The last effect of the southern ebb was the upheaval of the whole of the country. It took place before the end of the coal period; since it has not been proved, up to the present, that any vestige of the last, or Stephanian, period exists in the country.

All the occurrences—movements, faults, bendings—of which I have just spoken, had given to our original soil an entirely different appearance to that which we see to-day. The special flora of the sands and clays of Outrages probably represent, according to the researches on this subject by the Abbé Cœmans, the vegetation of a highly mountainous country under a climate quite different to ours.

This physical structure slowly disappeared under the incessant action of meteorological influences which endured from the upheaval mentioned above until the first stages of the Cretaceous epoch, that is, during the greater part of the secondary period. The hills sank in the course of time, a general levelling off took place, and soon the valleys were formed where the rivers Meuse Sambre, Escaut, and Haine now run.

The last is of peculiar interest, as it has excavated to a considerable depth in the coal-bearing district of Hainaut, where it even assumes the appearance of a lacustrine depression. It takes its rise in the east on the watershed of the Meuse and the Escaut, speedily breaks through the barren rocks, reaches a depth of 200 metres towards Peronnes, of 310 metres near Mons, and 318 metres near Boussu. Thence it begins to rise, and continues to do so in French territory.

The deposition of our barren strata probably commenced before the cretaceous epoch only to stop at the present time. The first in point of time are the sands and clays of Outrages or Wealden. They are formed from the *débris* of the vast erosion, and constitute in some way the transition between the purely continental period and the subsequent entirely marine period.

An estuarine or marshy deposit partially filled up the valley of the Haine and Escaut. It is composed of clays, sands, and lignites, which are chiefly met towards the north watershed of this valley. The sands especially attract our attention, on account of the difficulties, arising from their shifting character and the amount of water in them, that they oppose to the work of sinking shafts. These difficulties for a long time appeared to be insuperable.

The marine deposits that followed spread out towards the centre of the valley by degrees, and finally succeeded in entirely filling it. These are included in the cretaceous horizon, and from the base upwards consist of: Millstone of Bracquegnies and Bernissart, bed of gault, analagous to the Blackdown beds in Devonshire, sands and sandstone with gelatinous silica (?) bourtia of Mons, green marl with rolled pebbles; Dièves, impermeable clayey beds, which often form the foundation for tubbing; Fortes-toises, blue marls with siliceous concretions; Rabots, paving-stone siliceous beds in separate kidney-shaped masses or as continuous layers, porous, and containing enormous quantities of water; grey chalk, white chalk, and Ciply beds that sometimes have a considerable thickness, and which, owing to their fissured nature, carry water like the Rabot or paving-stone bed.

The greater part of the cretaceous rocks occur below sea level, whilst the tertiary rocks within the area of coal basins are above that datum line. They are composed of limestones and clays of the Montain horizon over a constricted area in the district of Mons; clays, sands, and Landénian sandstone which borders this gulf, and extends over a high plateaux (Thanet sands in England); Yprisian clays and sands (London clay), and Panisitien and Brussels sand and sandstone (Bracklesham, Bournemouth, and Bagshot beds) which constitute the upper layers in Hainaut. It is at the base of the Brussels sands where the great sheet of water is found that supplies potable water to a large number of towns and communes in Belgium, Brussels itself among others. This bed also offers great difficulties in sinking on the high plateau of the centre of Hainaut.

The overlying beds in the province of Liége scarcely offer, from the miner's point of view, as much interest as those of Hainaut. The cretaceous rocks are less complete, are thinner, and are situated above the valley of the Meuse. Up to the present, they have scarcely caused any serious trouble in sinking shafts.

Working at Great Depths.

In Belgium the necessity of carrying our coal workings to a great depth in the near future was forced upon us some time ago. Fifty years ago the science sections of the *Academie Royale de Belgique* discussed the means to be employed if workings were carried to a depth of 1000 metres. Professor Devillez, of the Mons School of Mines, whose recent decease is regretted alike by science and industry, answered this question, and proved that the means for extraction, sinking, and ventilation which existed at that time would suffice all needs. Since then these means have been improved, and the ideas of the illustrous professor are as accurate now as they were then. This statement is confirmed by recently installed plants. Very shortly after the Professor made these assertions, mining engineers no longer hesitated to attack these great depths.

In all instances where the workings are comparatively important, and it is desired to increase the output, it has to be done at depths which, if they do not actually reach 1000 metres, are not far from it.

Quite recently this question has presented itself under a different aspect. Apart from the power of the winding engine itself, the quantity extracted diminishes in proportion to the depth, on account of the fact that the original dimensions of the shaft have to be preserved as it is deepened. The shafts are thus somewhat narrow throughout, and this state of affairs will have to be remedied, as it is impossible to use cages carrying two tubs abreast.

Shaft at Marchiennes.—Here a problem was presented to Mr. Alfred Soupart, director of the Marchiennes Colliery, and he solved it in a daring and somewhat unexpected manner. The circumstances were as follows:—There were two shafts at this colliery, one 900 metres (3000 feet) deep, elliptical in cross section, and from 2·60 to 2·80 metres long; the other circular, with a maximum diameter of 3 metres. From these shafts a very good deposit was worked, giving a large output. Mr. Soupart determined to use both of these as winding shafts, the upcast continuing to be used as such by applying Briart's ventilation trap. In the future these shafts will be carried to a depth of 1200 metres at least. The condition of the large output—say 1000 tons daily—could not be met by the then existing four-decked cages, carrying one tub on each deck, except by increasing the engine speed beyond the permissible limit. It was therefore determined to increase the height of the cages to 10 and 12 decks respectively. The landings at the surface and the insets at the bottom of the shaft have been increased in number, and the pit-frames are 25 and 30 metres high at the two shafts.

The guides are solidly constructed of Vignoles rails in two ways. At No. 1 shaft the rails are opposite one another, and consequently the cages are guided at their ends. As the passing of the cages is very difficult in some confined portions of the shaft, recourse is had to the Soupart system. At No. 2 shaft Briart guides have been put in.

The cages with 10 decks weigh 3500 kilogrammes (7700 lbs.) and the 12-decked cages weigh 4000 kilogrammes (8800 lbs.). The dead weight with the empty tubs are 6000 kilogrammes and 7000 kilogrammes (13,200 lbs. and 15,400 lbs.) respectively. The loads amount to 5000 kilogrammes and 6000 kilogrammes (11,000 lbs. and 13,200 lbs.).

The time occupied in changing is 120 seconds at No. 1 shaft and only 80 seconds at No. 2. For winding, 120 seconds are required. The total time for each journey of a cage is thus four minutes or more.

The output at the present time is from 700 to 800 tons per day, and shortly a total of 1000 tons will be reached. In case of accidents at No. 1 shaft, No. 2 shaft will still give a very considerable output.

Fire-Damp and Ventilation.

The history of fire-damp in Belgium can be sub-divided into two entirely distinct periods. The first extends from the earliest times up to the year 1847, when the first sudden outburst took place in the Mons seam; and the second from that year until the present time.

Several years ago, experiments made in Wales drew the attention of engineers to the function of the very fine and often impalpable coal dust suspended in the air of mines. The experiments were repeated in other coal-producing countries, and in spite of the sometimes contradictory results that they have given, it is now admitted that if these dusts are not explosive by themselves, yet they greatly aggravate explosions of fire-damp when mixed with it, and that, above all, they act to propagate the explosion.

First Period.—Slow Disengagement.—Let us here recall the fact that Belgian coals are more dusty than any others, and that this condition tends to increase with the depth. The first period was characterised by gaseous liberation more or less active, but always increasing, and without abruptness. It was admitted in principle that, besides the precautions necessary to protect the gas from contact with any kind of flame, a sufficient and continuous ventilation was sufficient by itself to preserve the miners from the attacks of their constant enemy. The introduction of the Davy lamp into collieries, in spite of the improvements embodied in it, only offered a relative and sometimes doubtful security. The real safeguard consisted in removing the gas from the workings in proportion to its production.

I believe that I can say with truth that although the glory of having given us the safety or Davy lamp belongs to England, Belgium, in spite of the small extent of her territory, has produced the greatest number of ventilating appliances. Amongst us was first felt the necessity for getting rid of the inefficient and dangerous ventilating furnaces. I must not, however, recall all that has been done in this way, as it has scarcely more than a historical interest. In order to restrict myself to one apparatus that has lived, I will merely mention the Guibal fan, which is universally known and applied. For several years other apparatus, whose chief feature is their smaller bulk, have come to us from other countries, and are running side by side with it. I may instance the Rateau fan, which, in addition, appears to have the advantage of greater efficiency. If this is really so we shall cordially adopt it, in the belief that we must above all things keep in view the good ventilation and safety of our mines. But if the Guibal fan has to give place to other and more perfect apparatus, the illustrious Professor of Mons will still retain the lasting glory of having contributed more than any one to the establishment of the true principles of ventilation and circulation of the air in mines.

I must, however, not forget to remind you of what has been done to prevent the ignition of fire-damp by explosives. In this connection I may mention mechanical drills, which, when used in conjunction with wedges, allow us to get through substances that have been the cause of so many accidents. I must also refer to the Thomas-Frangois apparatus, which has replaced explosives not only in the seam itself, but also in driving stone-drifts.

Second Period—Sudden Outbursts.—According to Mr. Gustav Arnould, no outburst of gas had been observed prior to 1847. At first such outbursts occurred on a small scale, and attracted but little attention. In 1865, in a colliery in the Mons district, the first outburst of this kind took place, under strange and altogether extraordinary circumstances. Other explosions soon followed, and caused some of the most dreadful catastrophes that have ever occurred in mining history. The gas showed itself under entirely novel conditions, of which our country seems to have kept the sad and terrible monopoly. Sudden outbursts of enormous quantities of fire-damp occur simultaneously with the extensive projection of broken coal, and this takes place without any warning signs. Floods of inflammable gas invade the roads, the intakes as well as the return air-ways, driving back the air-current, rushing up the downcast shaft, and sometimes taking fire at the furnaces on the surface. It is needless to say that in such a case everything is destroyed, especially the winding gear, which is so urgently wanted on these occasions for getting the men out of the mine. Every one is overwhelmed in the presence of the enormous jet of flame rushing out of the pit, and lasting as long as the out-

burst itself. The quantity of gas evolved during this phase of the phenomena has been estimated at 2400 to 3000 cubic metres (84,700 to 106,000 cubic feet) per minute, an astonishing amount—that is, however, only an average. What then can be the volume in the first stage of the outburst at the moment of explosion?

In the presence of such accidents, it has been and still is asked whether science can ever succeed, not in preventing their recurrence, but in rendering them harmless. To increase the ventilation is altogether illusory in the presence of such enormous quantities of gas to be diluted with air. The best means that has been found up to the present is to keep boreholes in advance at every working face with the idea of draining out the gas from the strata, to restrict the advance, and to so dispose the air ways that the air current cannot be reversed. According to official statistics, the application of these measures has already had good results, and the number of victims has sensibly diminished.

This is satisfactory as far as it goes, but it does not go far enough. Sudden outbursts still occur even more frequently than in the past. It is true that most of them are harmless, on account of the precautions taken to prevent ignition of the gas, but catastrophes may again take place, and show our impotence afresh.

However, as Mr. Guibal says, we must not despair of science. Who would have thought, before Franklin's time, that we should ever succeed in drawing down lightning from heaven? Perhaps some day will bring a man of genius, who will teach us how to rid the earth of fire.

But while we await this happy outcome, must we abandon the coal seams which give rise to such terrible consequences? Must we exclaim, as so many have done, "*Auri sacra fames*"—Oh, accursed thirst of gold—over this troublous question, before which we may well hesitate? Ought we not to think first of all that these seams, dangerous as they are, form part of the public wealth, and that nothing of this wealth can be obtained by the human race without incurring the dangers, losses, and sacrifices that follow in its train.

Sir LOWTHIAN BELL said the paper was made the more interesting by the fact that of all the countries he had visited there was none where fuel was obtained in the face of greater difficulties than was the case in Belgium. He was glad that the author encouraged them to pursue any inquiry as to the best means of working coal independently of explosives, because there was no proof—rather the reverse—that explosions did not occur from time to time in consequence of the use of explosives.

Professor BAUERMAN referred to the remarkable discoveries at the Bernissart deep pits when driving a long stone drift through the Wealden rocks. One great pot-hole was found which proved to be an enormous cemetary of iguandons. By the assistance of the Belgian Government these reptiles had been taken out and placed in the museum, where they now formed one of the most remarkable exhibits of mining and fossil work that had ever been seen.

TIN MINING IN CORNWALL.

Discovery of Important Tin Deposits at the New Park of Mines, near St. Columb, Cornwall.

BY A CORRESPONDENT.

THE New Park of Mines lies three miles south of St. Columb, on the east side of the road leading from that town to Truro. The enclosing rock (country) is entirely clay slate or killas, which may be more accurately defined as a light coloured, white, grey, or buff, thinly bedded, jointy, hardened shale. The dip of the killas varies from 30° to 90° in a general northerly direction. There is granite within ¾ mile of the mine—in fact, the north western corner of the great mass which lies to north of St. Austell. On the western side of the road referred to is the Park of Mines, which when working not long since returned black tin ore to the value of about £50,000 within the limit of 1 acre of ground, and at the shallow depth of about 45 fathoms. The richness of the mineral deposits was proved by the average produce of the tin ore, which in 1874 amounted to more than 5 per cent., or, in other words, 1 ton of tin ore gave more than 1 cwt. of black oxide of tin fit for smelting, and in the same year yielded 231 tons of black tin, some of the deposits being massive blocks of stone, giving from 70 to 75 per cent. of black tin—deposits not equalled by any other mine in the county. The present company having from preliminary trial operations satisfied themselves that similar deposits of mineral existed in the western ground, put down a shaft to 20 fathoms from surface, and have from thence driven levels of over 100 fathoms in length north, south, east, and west, besides accomplishing an enormous amount of other underground exploratory work. The Great White Works lode is the principal lode of the district, and in its vicinity large deposits of mineral are expected to be met with. As an illustration, an offshoot from it has, in fact, given a large and valuable deposit; 10 tons of tinstone broken from it yielded 14 cwts. 20 lbs. of black tin ore. In driving the levels several lodes have been cut through, all containing mineral in a massive and highly crystallised form, and the ground throughout is permeated with small lodes, all tinny, exactly as in the workings in the old mine. The riches of the old mine appear to have been derived from lateral offshoots of the north and south veins, as in their proximity lenticular masses of tinstone occurred interspersed between the planes of bedding of the killas. Deposits of this kind, when lying nearly horizontal, would be called in Cornwall, floors, and they correspond in some measure to the flats of the North of England. In the New Park of Mines also one of these flat floors has just been met with 3 fathoms above the adit level, and from which there is now at surface the best rocks of tin ever yet discovered in the mine, although the discoveries have been of a most remarkable character. These stones weigh nearly 1 cwt. each, are highly crystallised, and almost as black as coal. This is distinct corroboration that at least similar riches exist in the new ground as in the old, but explorations below the 20 fathom level, now under water and yet untouched, are about to be taken in hand immediately, for which purpose a pumping-engine is in course of erection, and a battery of stamps which can be driven by water power close by is also in course of erection, and the mine can thus be economically and rapidly developed. The deposits of mineral gone down below the level are of the same massive highly crystallised and most remarkable character. From the operations to the 20 fathom level with more temporary appliances the company have risen and sold tin to the value of about £1000. It requires no burning, and realises the highest price in the market, the last sale at Redruth realising £43 2s. 6d. per ton. As soon as the machinery is in working order there is every probability of such profits being made as will immediately place the mine in the dividend list, and afford additional testimony to the fact that there are at least equal riches in Cornwall to those taken out by those who in their day and generation were wise enough to explore for them, and if home mining be conducted on honest lines Cornwall is still one of the finest fields for enterprise and capital, and for the capitalist and labourer to work hand in hand. The works are under the skilful management of Mr. F. W. Michell, C.E., M.E., of Redruth.

MINING IN CORNWALL AND DEVON:

NOTES ON WESTERN MINING, EDITORIAL AND OTHERWISE.

(BY OUR SPECIAL CORRESPONDENT.)

THE improvement which took place in the Cornish share market last week has been well maintained, and there is quite a mild excitement among mining speculators, who are watching both the metal and share markets with intense interest. The metal market has fortunately shown a disposition to continue the upward movement, and in the opinion of Cornishmen, at any rate, circumstances are combining to render a relapse at least improbable. Most people are looking for a further rise as a necessary coollary to the advance in silver and copper; the probable effect of the Wilson Tariff, and the Chino-Japanese war. There is a good deal of speculation as to what the particular influence, if any, the war in the East will have on the production from the Straits, and the general impression here is that it will tend to, in some degree, curtail the output; but at every slight reaction in tin the more timid of the holders have offered small lots of stock, and these have been quickly snapped up. The fact of the orders having come from outside the county seems to indicate that other people besides Cornishmen have a shrewd suspicion that tin has seen its lowest. It is scarcely necessary to particularise shares which have advanced. All have, more or less, from that direction.

THE share market has wonderfully improved, and there is a firmer tone than at any other period of this year. Orders have come in to the brokers from all parts of the country. Most of them have been executed, but only after considerable difficulty have shares been procurable; indeed, had it not been for the fact that tin has fluctuated a little they would not have been so easily obtained. Several of the low priced have more than doubled their market value. Cook's Kitchen's, for instance, might have been obtained a fortnight ago, for from 2s. 6d. to 5s., but a buyer would now have difficulty in securing them at 25s. It is very satisfactory to see that Carn Breas and Tincrofts have had so substantial a move, and it seems to suggest that people still have great confidence in the prospects of these important mines. Dolcoaths are also better, and the price seems to keep very much on a level with the price of tin. Wheal Grenvilles have had a most marked advance, and are exceedingly scarce. A few were done early in the week at between 19 and 20, and were then very firm. Wheal Agars, West Kittys, East Pools, and South Frances are all quoted higher than a week ago. We hear of a little improvement at South Frances, somewhere in the Grenville part of the mine.

AT the time of writing the fight in the Stannaries Court between Wheal Grenville and South Condurrow as to the alleged encroachments is being still continued, having been in progress for five or six days to the mutual advantage, presumbably, of all the legal gentlemen engaged. The evidence throughout has been purely technical, and the real question at issue seems to be as to whether the mechanical or the mathematical system of dialling is the more reliable. We still think that the matter is one which a mining expert should have been called in to decide.

WEST KITTY meeting was held at St. Agnes on Tuesday, when the substantial profit of £1050 was shown, and a dividend of 3s. per share declared—quite as much as the most sanguine could have anticipated. In spite of the fact that they have had considerable delay caused by the changing of the pitwork, their returns were about ten tons in excess of last time. On the south section capital account, the £3000, of which was subscribed by a 10s. call, £1500 still remains unexpended, and with this they hope to carry the shaft down a good distance. The mine is looking as well as ever, in spite of the prognostications of the pessimists. They have also an encroachment question on at this mine, the alleged offender being Wheal Kitty, its neighbour. We are glad to say that from the tone of Tuesday's meeting there appears to be every prospect of an amicable settlement.

THE unfortunate shareholders of Wheal Uny are not yet out of the wood. The Official Receiver was under the painful necessity of applying to the Vice-Warden on Saturday to make another call of £5 per share. Mr. Henry Rogers, who appeared for a large shareholder, expressed a determination to still further investigate the accounts. We have probably not yet heard the last of Wheal Uny.

BOTALLACK meeting is due on Wednesday. We hear that they will probably meet costs on the four months' working.

THE MERCHANDISE MARKS ACT.—Sebastian Notton, described as a tobacco pipe manufacturer, of 86, Aldersgate-street, was summoned under the Merchandise Marks Act, at the Guildhall Police Court on Thursday, the 16th inst., for having unlawfully applied a false trade description—to wit, the word "Pebbles" to certain spectacles, and further with having sold them in contravention of the above Act.—Mr. Frank Safford appeared as counsel for the Board of Trade, and Mr. Cohen, solicitor, for the defence.—Mr. Safford said the prosecution had been instituted at the instance of the Spectacle Makers' Company and others, in pursuance of the Act of 1891, which enables the Board of Trade to undertake prosecution where offences appear to them generally to affect the interests of any trade. The spectacles sold by the defendant bore upon the side of the steel rim the word "pebbles" engraved, and had been invoiced by him as pebble spectacles to various persons in the trade who had applied for pebble spectacles, but upon subsequent inspection they turned out to be merely glass. Such description falsely indicating the material of which the goods were made was a breach of the Merchandise Marks Act. Several witnesses were called who bore out the counsel's statements, and showed that the spectacles had been sold nearly 70 per cent. below the trade price of pebbles. The defence was that the defendant was a Frenchman who had only been in this country a year, and did not understand English, and was ignorant both of the requirements of the Act, and also of the meaning of the word "pebbles." On examination, the defendant, who was accompanied by an interpreter, stated that he was a pipe manufacturer, and was ignorant of the spectacle trade, and had been persuaded by friends abroad to undertake to sell spectacles on commission, and until these summonses he neither knew the meaning of the word "pebbles," nor that spectacles were made sometimes of glass and sometimes of pebbles.—Mr. Alderman Newton said the prosecution had been very properly instituted, and fined the defendant 40s. on each summons, and costs, making in all £15 13s., the goods being forfeited to Her Majesty.

MINING NOTES FROM JOHANNESBURG.

BY H. BUSH, M.E.

Langlaagte Royal

will make £8000 for August, and when the extra stamps are erected this mine should pay back its capital every year I anticipate the debt now about £10,000, and the extra stamps (60) will take away nearly the next 12 months' profits; but at the present price—52s.—it is only a 3½ years' purchase, and these shares will see a substantial rise whenever there is a change of feeling in the market. It is probable they may again water the capital to pay off the debt for the 60 stamps, and they can pay dividends within 12 months.

Robinson's.

The extra stamps, making 120, are expected to be running by Christmas, and it is probable the returns from the mill will be from 13,000 to 14,000 ounces.

City and Suburban.

The machinery at this mine is not strong enough for the work, and this means very heavy charges before the next 12 months. The shares are far too high.

Heriot's

are making over £5000 monthly, and with the extra stamps now being erected, they should next year pay back their capital. The shares at 86s. should go very considerably better. This means only a 4½ years' purchase.

Buffelsdoorn.

The profits of this mine should come up to nearly £100,000 per annum, and this makes about a four years' purchase, but owing to this property possessing more claims than any company on the Rand (excepting the East Rand Proprietary) these shares are the cheapest on the list, and if the property was in other hands the shares would be worth considerably over £2. At present market value they are a good and profitable purchase.

Geldenhuis Estate

will pay back its capital every year (after this year). There is a considerable rise in these shares.

East Rand Proprietary.

Works progressing favourably, and mine opening up well. These shares will rise on their merits shortly.

Denny Dalton.

This company is increasing its capital by the issue of 20,000 new shares. Mr. Klimkes' report confirms my report published three weeks since. Matters do not look promising.

Knight's.

Development will at once proceed. A new shaft has been commenced on the south series; if results prove satisfactory further plant will be erected. Pannings so far show well.

George and May.

The south reef continues to open up well, and the crushings wil in the future be better than the past. The company has a considerable amount of cash in hand, and the prospects are of a very promising character.

Champ d'Or French Company.

Various rumours in connection with this property continue to be circulated, notably in the *Johannesburg Star* and the *Mining Argus*. It is stated that the present output will be maintained, viz., 4500 ounces a month for a couple of months, after which it will be dropped to 4000 ounces, in view of the fact that the sums due for machinery will have been paid off. It is also stated that every nerve is being strained to keep the output up, and that the mine should close down for development. All these statements are most unreliable, being merely a repetition of false rumours with the same object as practised 12 months since. The success of this property under the judicious management of Mr. Chonan, has upset certain amalgamation schemes which were cut and dried months since; this is actually the reason of adverse reports which are totally untrue and maliciously circulated for obvious reasons. The progress of this mine has been carefully watched by me, and through the *Financial Times* and *The Mining Journal* I have from time to time advised the public, and not wrongly, through these adverse rumours. I have caused a thorough inspection of the mine and am pleased to be in a position to dispel the whole of these untruthful canards. The mine is well ahead of the mill, and the reserve ore in sight is equal to between 30,000 and 40,000 tons, development at the lower levels is being energetically pushed forward, and the ore is being put through without any attempt at picking. Not only will the present output be maintained, but there is every probability of a further increase. The cyanide plant is inadequate and the tailings which are worth from 7 dwts. to 8 dwts. are increasing considerably; the statement as to the indebtedness for machinery is absolutely false. At the present time not only has every liability been paid off, but the company have a large credit at the bank of several thousands of pounds, and the profits now being made are equal from £8000 to £10,000 monthly. It is the intention of the company to provide against further requirements by keeping a large amount to the credit. By November it is anticipated they will pay dividends and continue them quarterly; by that time they will have from £30,000 to £40,000 in hand, and will be in a position to renew any surface plant as required, and extend their cyanide operations, their tailings being extensive. Meanwhile, it is under consideration to increase the stamps by an additional 30, this expenditure to be charged out of gold won, and also to increase their cyanide plant. These shares will be worth 100s. by the end of the year, and are a thorough good purchase.

Champ d'Or Deep.

For some unaccountable reason this mine, one of the best developed on the Rand, is allowed to languish, rumours of the reconstruction and amalgamation are the order of the day, the battery could start without further delay, but this is not wanted by the gold fields, although the free milling ore will give 12 dwts. over the plates; this would appear to be another attempt at wreckage for the purpose of forced reconstruction. The mine is a very fine one, and the shares should be of considerable more value if the mine were allowed fair play.

Bradbury Drill Sharpener.

Excellent work is being done by this machine, its capabilities being equal to four blacksmiths; orders are coming in from the leading mines. Messrs. Begbie and Co. are the manufacturers, and they are to be congratulated on the way they are turning out these machines. The Langlaagte Estate are saving £2000 per annum through the use of them. Mr. Alfred Lewis has done wonders in bringing this machine to the front, which in the future will effect large savings in the working expenditure of all the principal mines.

Black Reef.

Real solid prospecting work is being done right along this series of reef, and at any time it may be expected that rich strikes will be made on these much despised beds. Undoubtedly these reefs are patchy, but little legitimate work has been done so far that it is only to be expected that with the more practised methods of working low grade ore we may expect to see work started sooner or later of a more permanent character. The success of the Orion gives encouragement to these anticipations.

Swaziland.

Encouraging reports keep coming in as to the prospects of tin mining, and it is not improbable that before many months there will be a considerable amount of prospecting. So far the indications are highly promising.

Langlaagte Estate.

This mine is doing its very best, and the adverse statements as to the future prospects are not without foundation. In spite of all statements to the contrary, the future has a very black outlook, and the shares at £4 5s. are decidedly overvalued.

THE GOLD AND SILVER QUESTION.

By THOMAS CORNISH, M.E.
Author of "Our Gold Supply."

THE following yields of gold and silver from the various countries in the world, as given by Rothwell in his work, "The Mineral Industry," for the year 1891, will give some idea as to whether there is enough of either of the precious metals being produced to supply the demands of the financial requirements of the money-using people:—

THE WORLD'S PRODUCTION OF GOLD AND SILVER FOR THE YEAR 1891.

Countries.	Gold, Dollars.		Silver, Dollars.
United States.....	33,175,000	..	75,416,500
Australasia	31,399,000	..	12,929,300
Mexico	1,000,000	..	53,000,000
Russia	24,131,500	..	575,500
Germany	—	..	7,480,800
Austria-Hungary ..	1,398,500	..	2,103,500
Sweden	58,000	..	173,700
Norway	—	..	230,200
Italy	100,000	..	337,000
Spain	—	..	2,140,400
Turkey	7,000	..	55,000
France	133,000	..	2,955,600
Great Britain	3,000	..	377,200
Canada	1,666,000	..	518,000
Argentine	82,000	..	610,100
Colombia	3,472,000	..	1,298,000
Bolivia	67,000	..	15,488,000
Chile	1,436,000	..	3,000,000
Brazil	455,300	..	—
Venezuela	1,000,000	..	—
Guiana, British	1,250,000	..	—
Guiana, Dutch.....	444,200	..	—
Guiana, French	548,000	..	—
Peru	75,000	..	3,112,000
Uruguay	93,500	..	—
Central America....	150,000	..	2,000,000
Japan	515,000	..	1,798,800
China	5,330,000	..	—
Africa	14,199,600	..	—
India, British	2,495,000	..	—
Corea.....	750,000	..	—
Taking $5 to £1..	$125,299,700	..	$185,599,600
	£25,059,940	..	£37,119,920
			£62,179,860
Deduct for use in arts and industries..			£12,179,860
Leaving a total for currency say			£50,000,000

To be distributed amongst a money using-population throughout the world of, say, 1000 million people, or the moderate sum of 1s. per head for the year 1891.

The value of silver has been taken at $1 per ounce, but taking the reduced value lately attained it would, of course, mean so much less of real purchasing power. But why within the British Empire a florin maintains a value of one-tenth of a pound, it is difficult to perceive, while the rupee should only be worth about 1s. 1d. These are the anomalies that require consideration and the earnest thought of intelligent reasoners. It is not enough that any one should merely assert that there is an over-production of silver simply because of the fact that the curious incident exists that in one portion of the British Empire 10 florins are exchangeable for one sovereign in gold, while in another section of our Empire the same sovereign is exchangeable for, say, 17 or 18 rupees. It is for the assimilating the values of silver coin or currency throughout our own Empire in the first place, and establishing a ratio that would be convenient it should bear with gold, that has caused me to give the matter some consideration, and to arrive at the conclusion that a 10 per cent. ratio, as I proposed, would be fair and reasonable. So far as I can see, it would have no great disturbing influence; it would work its way into gradual use without creating any financial crisis or alarm. It would be of immense and immediate benefit to trade, commerce, and industries connected with India and the eastern portions of our Empire, as with our Australian colonies, from whence England has been enabled to draw such large supplies of gold, and which now are also great producers of silver.

Canada, with its vast extent of rich mineral country, is capable of materially increasing its output of gold and silver, and its intimate relations with Great Britain render it essential that its currency should be of similar value to that of other portions of our Empire.

Africa, South, East, and West, in which we have vast possessions and interest in rich mineral country has become, and is likely to continue, a great producer of gold, and will no doubt also soon be producing silver. Its vast population of European and native races are now deeply interested in the gold and silver question, and the relative values the two metals should bear to each other in coin currency and their exchangeable values.

Thus, Great Britain, with its Indian and Colonial dependencies, commands the great channels of trade and commerce of the world, while London is the central office for controlling the financial arrangements. Would it not, therefore, be advantageous not merely to Great Britain but to our Indian, Australasian, African, West Indian, and Canadian dependencies to have our gold and silver currency on some fixed ratio as to the value the two metals should bear to each other, instead of the present varied condition in different parts of our Empire?

The rush to Africa is not for the special welfare of the native races, nor is the opening of the interior with the object of growing wheat or cabbages, although that will follow in due course. The rapid development of Africa is in consequence of its vast gold resources, and it is on the profitable working of its auriferous wealth that its great future so much depends.

The opening and profitably working a few gold mines in Mashonaland, or in the Matabele Country, or Uganda, or any other part of the interior of Africa, will be the magic wand of civilisation and rapid development of the country. More real progress and practical good will result from five years prospecting and developing the gold fields in the interior of Africa, than a hundred years of the ordinary methods of development of trade and barter, and rival missionaries work.

Those who have watched the progress of events since the discovery of gold in California and Australia, and the increase and distribution of wealth thereby created, can fully appreciate the probable benefits likely to be conferred upon the civilisation of the native races in Africa, and the practical results of profitable trading by the opening of new gold fields in those parts of the country hitherto unknown or little explored. The most uncultured of native races soon learn the value of gold and silver money in coin, and are all as anxious of its acquisition as most civilised people. In my estimate of 1000 millions of money-using people now interested in the gold and silver question, I include chiefly the populations of Europe, Asia, America (North and South), Australasia, and the civilised portions of Africa only. The vast population of native races of that colossal country is a factor yet to be dealt with, but the time is not far distant when they will want to participate in the advantages to be derived from the development of the mineral resources of that country.

THE EDITOR'S LETTER BOX.

*** We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

THE DE KAAP MINING DISTRICT OF SOUTH AFRICA.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—The facilities now afforded for working mines in this district can be understood in contrast with recent times before the adoption of the cyanide process of treating the tailings, which now renders the profitable working of mines, that until recently could only be worked at a loss. To the cyanide process the increase in the gold return of the Sheba Mine from about 3000 ounces a month to over 8000 last month, is principally due, and other mines have availed themselves of the facilities gained by its use, and others will find it to their advantage to do so after this undoubted proof of being able to extract gold that would otherwise remain in the tailings. Nearly one-third of the gold returned from the Witwatersrand Mines is obtained by this means, amounting to close on a ton and a half a month, and if every mine that makes use of the cyanide treatment increases its returns in the same ratio of one-third, it can easily be imagined that several will soon enter the dividend list that would otherwise be losing money. Moreover, the general contour of the district is in favour of cheap working, being of a mountainous description, with rivers at the base offering opportunities for intersecting the reefs by adit levels, and of working machinery by water power, thereby saving the expense incurred by the application of steam power. Coal has been discovered in the neighbourhood, and is available for the uses to which it is considered desirable to apply it, and a railway is complete to within a few miles of the town of Barberton, from Delagoa Bay, thereby establishing improved means of transport of machinery, provisions, &c., and at a reduced tariff; and with these improved means of working it has occurred to some mineowners that men who are practical and competent from experience gained elsewhere, are necessary to take fullest advantage of them for the benefit of the companies that work the mines.

Geologically considered, this district compares well with other mining districts of the world, and, in some instances, is similar to the Victorian gold field of Australia I visited some years ago, where mining has been systematically carried on for a number of years to depths not yet attained at De Kaap, but which may prove to be necessary to develop it thoroughly, as some of the reefs I inspected traverse schists similar in character and colour, and appeared to be well defined and permanent, requiring to be systematically excavated and treated. Beyond having been partially scratched there remains a large tract of unexplored territory, where it is as likely as not to make more discoveries of rich mines, as in it already exists one of the best gold mines of the world, which returned last month over 8000 ounces of gold, an amount in my opinion not equal to the fullest capacity to which the future working of this mine is capable.

The vein at this mine is considered by some authorities to be a segregated vein; be it so or not, it is sufficient to know that the appearance it presented when I paid it a visit was that of permanency, only requiring to be vigorously explored, and its present returns therefore confirm the impressions I obtained. The geological features of the district are not as yet thoroughly understood. There are granite, schists, sandstones, trap rock, aluminium, &c., and besides being auriferous it has also been recently proved to be stanniferous, which proves what I have said about the possibility of making discoveries of minerals to be not without a semblance of warrant, or to be justifiable beyond doubt. Perhaps the tin recently discovered has been known to exist for some time past by a prospector, who, in his eager search for the precious metal, had considered it not worth his attention, or not being acquainted with mineralogy or the use of the blow pipe was unable to test it or to make an assay. Besides gold and tin, other minerals of marketable account may exist, and one place I visited favoured the idea of the discovery of a slate quarry not improbable, as the stratification was perfect, and the cleavage such as to give rise to the belief; but to prove it will, of course, require certain mechanical work to be applied of no very expensive kind. The discovery of a slate quarry would be a boon to the inhabitants, and enable them to roof their houses with slate instead of sheet iron.

Recapitulating my remarks, I would say that the improved condition of things should not escape the notice of the mining community; one of the best gold mines in the world is here, and has increased its returns from about 3000 ounces monthly to over 8000 last month. The discovery of coal will reduce the cost of working steam machinery where wood is not obtainable. The cyanide process of treating the tailings, and the near proximity of the railway, are advantages to be taken into account that mines worked in former times went short of.—I am, dear Sir, yours faithfully,

J. H. HAMPTON, M.E.

17*th August*, 1894.

COOLGARDIE GOLD FIELDS, WESTERN AUSTRALIA (BLACKETT'S CLAIM, LIMITED).—We notice that this company is near completion, and amongst the directors we see the name of Mr. F. A. Thompson, the able Chairman of the Mawson's Reward Claim, at the statutory meeting of which, held on Thursday at Winchester House, he spoke so ably. We also note that this gentleman is Chairman of the Blackett's Claim Gold Mining Company (Limited) which, according to latest advices from Coolgardie, promises to be a gigantic success. Although the shaft is down only a little over 60 feet, there is £60,000 worth of gold in sight, equal to the capital of the company. This reduces the responsibility of the shareholders to a minimum. We understand that the shares are being applied for privately and rapidly. The secretary, *pro tem.*, is Mr. W. J. Pattison, and the offices are at 30, Great St. Helens, E.C.

FERREIRA GOLD MINING COMPANY.—At an extraordinary general meeting of shareholders of the Ferreira Gold Mining Company, held at Johannesburg on Tuesday, 14th August, the agreement for the acquisition of the Wemmer, Ferreira, and Worcester Deep Level Gold Mining Companies claims, and for exchanging a small portion of ground with the Rand Mines (Limited), was duly adopted. The capital was increased from £45,000 to £90,000, and 44,000 of the new shares go to the Deep Level Company for its 30 odd claims. The remaining 1000 shares will be held in reserve.

REVIEWS.

THE ROYAL COLONIAL INSTITUTE.

Volume XXV. of the *Proceedings* of this influential Institute contains, as usual, a vast amount of interesting and important information. Of course, the matter has been before the members of the society, and has been published from time to time, in another form. Now it is collected together in a substantial and artistic volume, and is thus worthy of a place on the bookshelves of the library. The Royal Colonial Institute is a society of world-wide recognition; hence the information and literary matter published and circulated by such a body carries with it its own hall-mark of merit and value.

LATHE TURNING.

Turning Lathes. A Manual for Technical Schools and Apprentices. Edited by James Lukin. (Colchester: Britannia Company).

Everybody has, without doubt, been repeatedly through the experience of commencing an interesting-looking paragraph in a newspaper, and of reading through it more or less eagerly only to find that he has been induced to waste his time upon the artfully-concealed advertisement of some vendor of patent medicines. The almost inevitable result is a feeling of irritation and a fixed determination on no account to have anything to do with the quack who feels himself compelled to resort to such disingenuous schemes for advertising his wares. We have to confess to something of this same sentiment after reading through the book now before us, and at the same time to admit that the feeling, though very natural, is possibly rather unjust. This book, although it purports to be a manual for technical schools and apprentices, is in reality only an elaborate advertisement of the lathes and fittings manufactured by the well-known Britannia Company, of Colchester, who have a deservedly high reputation for the quality of their small machine tools. At the same time the little book decidedly contains a considerable amount of useful and practical information, and is obviously written by one who has had considerable practical experience in the art he professes to teach.

Any book on turning is bound naturally to challenge comparison with Holtzapffels' well known work, the standard English book on the subject. The volume now before us is, however, a mere superficial sketch, and has no pretensions to rank with the standard work we have named. It is divided into 20 short chapters of very unequal value; of course, having regard to its (unavowed) object, it is bound to include one on "choosing a lathe." Others comprise the general description of a lathe, its tools, the slide rest, and various "fancy" devices, such as the ornamental cutter, the eccentric, the dome, and the elliptical chucks, &c. There is also a chapter on metal spinning, which is, however, far too superficial to be of use to anyone, and the same may be said of a chapter on what the author chooses to call "Turning articles of a square section," although, as he himself points out, they are not really square at all. The best chapters are probably those referring to soft wood turning, in which the author gives a number of sound practical hints as to the management of the tools, and emphasises the important point, which cannot be too often insisted on, that there is no royal road to any art; anyone who wishes to rise above the ranks of the amateur, and to become a really skilled workman, can only do so by constant assiduous practice, and that practice devoted to the apparently simpler portions of his subject. This book will be more useful to the amateur and the intelligent apprentice than to those who have no knowledge at all of turning. The author is evidently a skilled worker himself, but he has not the knack of imparting his knowledge successfully in book form, whilst the arrangement of his subject matter leaves much to be desired. Thus the very first thing that a turner needs to be taught is how to sharpen his tools, seeing that skill in this department is indispensable: yet here the subject of grinding and setting tools is not attacked before Chapter XII., and then only in a very perfunctory manner. In the edition now before us, a certain amount of new matter has been introduced, and an error in the distribution of this is probably responsible for the curious confusion on pages 202 and 208, where the description of a simple form of goniastat is cut in two by an account of various forms of vertical cutter frames, so that the whole chapter becomes rather puzzling to the reader. At the same time, we repeat that there are many valuable little hints scattered through the book, but we think that its object, even as an advertisement, would have been better served had the name of the Britannia Company not been thrust so obtrusively into notice at every possible opportunity; apart from the question of taste, we are by no means convinced that an honest, straightforward advertisement is not better than one in disguise, however good the disguise may be.

THE PLANE TABLE UNDERGROUND.—The use of the plane table for mine surveying seems to have been largely overlooked, says Mr. R. G. Brown, in the *Engineering and Mining Journal*, though it affords a fairly accurate and very expeditious method of traverse running, and one not requiring a great degree of knowledge or experience to follow successfully. Of course it is not sufficiently close for final determination as to the reaching of an end line, or even for giving directions for a connection between different workings, but in this also it is often valuable. With an apparatus of the kind described below, I have frequently seen work that would check very closely with transit lines over the same ground, perhaps exhibiting a maximum error of 2 feet at the end of a traverse of 1000 feet comprising a dozen courses; further, two hours would easily suffice for the survey. The table used for this had a well-oiled opine top, 18 inches long by 14 inches wide. Underneath, at the ends, were rollers 1¼ inch in diameter, and fitted each with a small crank for turning, and a rachet and pawl arrangement for holding in place. The paper, a long strip, was wound on one roller, passed up over the end of the table, which was rounded for that purpose, over the table and around the other roller, the pawls serving to stretch the paper tight in any position, while allowing longitudinal motion at will. The rest of the apparatus is substantially that of the simple form of plane table, the alidade being of the familiar compass sights form. The operation scarcely needs describing, except as to a few details. The starting course is taken from the last transit course, or is brought down the shaft by any of the usual methods, according to the conditions; the paper is reeled along by means of the two rollers as fast as the courses approach closely the front end of the table; dimensions of workings are drawn in as the survey progresses. On completion, the work is traced on the mine map, which in this way is kept neat.

[Received too late for classification.]

THE VAN RYN GOLD MINES ESTATE (LIMITED).

NOTICE.

NOTICE IS HEREBY GIVEN, that Certificates for fully-paid shares in this Company are now ready for delivery in exchange for Certificates in the Van Ryn Estate and Gold Mining Company (Limited), and Certificates for the partly-paid shares are also ready for delivery in exchange for the Bankers' receipts.

STUART JAMES HOGG, Secretary.

1, Crosby Square, London, E.C., August 24, 1894.

C. PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c. and DROSS or ORES containing TIN, COPPER, LEAD, AND ANTIMONY.

HENRY WIGGIN & CO. (Limited),
NICKEL AND COBALT REFINERS,
MAKERS OF BEST RED LEAD FOR FLINT GLASS MANUFACTURERS,
BIRMINGHAM.

PACIFIC MINING AGENCY AND TRUST COMPANY.

A Corporation organised under the Laws of the State of California.
CAPITAL STOCK, £50,000.
BOARD.
IRWIN C. STUMP (Chairman), Manager of the Estate of the late U.S. Senator Hearst.
IRVING M. SCOTT, Manager Union Iron Works.
JACOB H. NEFF, President California Miners' Association.
P. N. LILIENTHAL, Manager Anglo-California Bank (Limited).
W. F. GOAD, Vice-President, Wells, Fargo, and Co.
D. M. BURNS, Capitalist.
R. C. CHAMBERS, Manager Ontario Mine, Utah.
WILLIAM C. RALSTON, Secretary (Secretary California Miners Association).
BANKERS—The ANGLO-CALIFORNIAN BANK (Limited).
HEAD OFFICE — MILLS BUILDING, SAN FRANCISCO, CAL.

THIS COMPANY sells Mines, Mining Claims, Ditch Properties, and Water Rights ON COMMISSION, and will act as Agent and Broker for the Sale and Purchase of such Properties.

It is intended to conduct the Purchase and Sale of Mining Claims, Ditch Properties, and Water Rights on the same basis as a real estate transaction.

The Company is prohibited by its Articles of Incorporation from buying or selling on its own behalf, or except upon commission, or as agent or factor for others.

The buyer pays no fees whatever, and there is no incentive to advance the price beyond the original figures at which the price and commission have been agreed upon with the seller.

It is not intended only to negotiate the sale of an entire property but interests in such may be sold or money obtained for development work.

This Company especially solicits the business of making reports or examinations for non-resident mine owners on any of their mines in the United States, and obtaining special information as to their condition and so forth (said reports being confidential).

Those who conduct the business of the Company have had long experience in mining operations, and it is their intention to place the Company in a position to inspire the confidence of all who seek its assistance in its integrity and fair dealing.

We respectfully refer to any Bank in the City of San Francisco and to the Anglo-Californian Bank (Limited), London, as to the standing of the Board of Directors of this Company.

Descriptions of properties for sale with maps, reports and all necessary information, are left on file in the office of the Company. Abstracts of such reports with prices of mines will be furnished pon application.

California has produced £267,000,000 in gold, and is still producing £2,680,000 a year. There are thousands of claims requiring capital for development. In other Pacific Coast States and Territories there are abundant opportunities for investment in mines of gold, silver, copper, lead, coal, and so forth. Information concerning these will be furnished by this Company on application.

This Company will also furnish competent engineers, superintendents, foremen, miners, millmen, assayers and others connected with the mining industry on application, furnishing their references and so forth.—Cable Address, "CHAPIN," San Francisco.

THE BUTE WORKS SUPPLY COMPANY, CARDIFF.

Telephone: No, 45 (Post Office and National).
Telegrams: Gething, Cardiff.

WAGONS.—New to Latest Regulations, 50 with one end two Side and two Bottom Doors, Wheels with Wrought Bosses large capacity (12 inches longer and 4 inches deeper than usual), ready for Lettering. New to Latest Regulations, one end and two side doors, sides and ends 3 inch red deals, all inside underframe timbers of English oak; delivery, about 15 per week, commencing forthwith. 50 End Tip 10-ton Coal Wagons to New Regulations, equal to new, prompt delivery.

LOCOMOTIVES.—One good second-hand Saddle Tank Loco. six wheels coupled, ready for instant work, and cheap for cash or three years' purchase-lease. 14 inch cylinders, by Avonside Engine Company, now at Cardiff.

RAILS.—Bridge, 14 to 120 lbs. per yard; Flange, 10 to 100 lbs. per yard; Double Head, 30 to 82 lbs. per yard; and Bull Head, 50 to 96 lbs. per yard.

SLEEPERS.—Wood, Iron, and Steel. A quantity of Metre Gauge Steel Sleepers for Sale, Cheap.

PORTABLE RAILWAY.—£11 per 100 Yards of Railway (Steel Rails and Iron Sleepers), complete.

3-TON CRANE.—Nearly new, on trolley; 4 feet 8½ inch gauge.

EARTH WAGONS.—75 side tipping 30-inch gauge steel wheels and steel axles.

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LONDON: AUGUST 25, 1894.

EXAMPLES OF MODERN CONCENTRATING MILLS.

THE general system upon which modern mills for the concentration of metalliferous ores are constructed has been explained in the leading articles which we have published on the subject in these columns during the past two issues, and it is now our intention to give actual examples of mills built on these principles. We will first of all take a mill built by the Humboldt Company of Cologne for the enrichment of the ore from the Arrayanes Mine at Linares, in Spain, and capable of treating 500 tons of ore in 10 hours. The mill is built on the slope of a hill, thus allowing the ore to run automatically from one machine to another. The motive power is steam supplied from three double flued boilers each 8 metres long. The mill is divided into four departments for coarse crushing, fine crushing and slimes. The first of these is driven by an engine having a cylinder 300 millimetres in diameter by 400 millimetres stroke running at a speed of 105 revolutions per minute, fitted with a separate condenser. The other departments are all driven by means of a coupled condensing engine having cylinders each 350 millimetres diameter (= 14 inches) × 700 millimetres (= 28 inches) stroke running at a speed of 100 revolutions per minute. The ore as it arrives from the mine is tipped into masonry bins or kilns from whence it slides on to fixed picking tables. These tables are covered with grates having holes 30 millimetres or 1¼ inches square, and here the classification commences. The large rich lumps of mineral are picked out by hand, and are sent on to the magazine; the large mixed lumps of ore carrying too much gangue to be hand picked out are trammed to an elevator and so to the stone-breakers of department No. II. The ore which passes through the holes in the picking table descends into department No. I., and is there classified in two parallel sets of trommels, each set having holes in descending order of 22·6, 16, 8, 4 millimetres. Two jiggers are apportioned to each trommel, making in all 16 in this department. Owing to the scarcity of water, that used in the kilns and the jiggers of department I. is pumped back again by means of a centrifugal pump.

Returning now to the mixed ore rejected from the first picking tables, we follow it to the two stone-breakers of department II. These breakers have each a jaw opening of 400 by 200 millimetres, and run at a speed of 200 revolutions, and are each followed by a double trommel having holes 16 and 18 millimetres diameter, which take out the small stuff and send on the coarse to a picking table 3 metres in diameter, of which there is one for each breaker. The rich ore is here picked out by hand and the poor is swept off the tables, and passes direct into roller crushers, of which there is one pair for each table. The rolls have a diameter of 950 millimetres (say, 38 inches), and a face of 300 millimetres (say, 12 inches), revolving at a speed of 40 revolutions per minute. The crushed ore passes downwards into department III., where it is classified in two sets each of four trommels having holes of 16, 8, 4, 2, 1 millimetres in each set, and is then fed into a series of 16 jiggers. These jiggers separate the ore into rich, middlings, and steriles. The rich is sent to the magazine, the steriles to the waste heap, and the middlings, which require enriching, pass on to two pairs of fine roller crushers. These rolls are 700 millimetres diameter by 280 millimetres wide (28 inches by 11¼), running at a speed of 45 revolutions per minute. Following each of these is a trommel which rejects all ore coarser than 1·7 millimetre, and which must be again crushed. The fine ore which passes through flows over an hydraulic classifier 5½ metres long, and from thence into four slime jiggers. The fine slimes are carried across the classifier, and on to a large spitzkasten, where they settle and thicken, and are then fed on to four Linkenbach tables, two of which have a diameter of 6 metres and two of 7 metres. It will be noticed that the whole mill is automatic throughout, and that the ore is not crushed until in each stage the whole of the rich mineral is separated from it, thus preventing the formation of slimes. The results obtained are very satisfactory. The framework of the mill is constructed of wrought iron girders covered with corrugated iron. We shall presently describe a mill which was erected with the view of recrushing heaps of old tailings, but the above-mentioned mill would efficiently do that work, the operation and machinery necessary commencing with the last pair of crushing rolls. The concentration of an ore containing only galena and gangue, as in the above instance, is a comparatively simple matter as compared with the complex ore of the Neuhof Mine at Zanowitz, in Upper Silesia, at which the same firm erected a mill for dressing 300 tons in 20 hours. In this case the average assay of the crude ore was lead 7·75 per cent., zinc 8·03 per cent., and iron 8 to 10 per cent. per ton of 1000 kilos. The lead occurs as galena containing the zinc as bunches of calamine in a gangue of dolomite, while the calamine and dolomite are often ferriferous. The galena is found in grains varying in size from 1 inch down to sand and slimes, and is rarely combined with gangue. The grains of galena are often incrusted with cerusite (carbonate of lead) which also occurs in a finely divided state. The mineral is comparatively soft, and the separation of the galena from the calamine presents no difficulty, because of the great difference in their specific gravities, but on the other hand the dolomite and calamine cannot be completely separated, for these two are intimately mixed up together, and form intermediate products of all kinds. The pure lumps of calamine contain about 45 per cent. zinc, but ore containing over 8 per cent. zinc is mixed in the smelting furnaces with richer material. After a series of experimental trials the design was fixed upon, the machinery made, and the erection commenced in August, 1884. The first trial was made on May 2nd, 1885, and the mill was in full working order by the second half of the same month. The total cost of the complete installation, including the piping and boilers, but excluding the belting, was £6500. Passing over the arrangement of the machinery in the mill, which generally was on the lines of that already described with the exception of the addition of a Crickbom trommel for the purpose of breaking up the clayey balls of ore which were liable to form, and also of the use of percussion lever jiggers, we will now consider the results obtained from the treatment of what must be admitted was a difficult ore.

In the month of August, 1885, the total amount treated on the mill was 6750 tons, of which 5160 came from old waste heaps, and 1640 from the mine direct. The results of the milling were:—

Galena 15 tons	Calamine 196	tons hand picked ore.
Galena 76·65 tons	Calamine 228	tons coarse pigs.
Galena 88·8 tons	Calamine 177·5	tons fine pigs.
Galena 34·5 tons	Calamine —	coarse slimes.
Galena 5·05 tons	Calamine 80·0	tons slimes from tables.
Total 220· tons	Total 681·	

= 3·26 per cent. crude ore = 10·10 per cent. crude ore.

The products of the jiggers from I. to VIII. assayed
Galena 78 to 84 p. c. Pb. Calamine No. I. 15 to 34 p. c. zinc.
Calamine No. II. 10 to 20 p. c. zinc.

The steriles contained on an average 0·3 per cent. Pb. and from 4 to 5 per cent. zinc.

The jiggers IX. to XII. gave:

Galena	from 60 to 75 per cent. Pb.
Calamine I.	from 18 to 30 per cent. zinc.
Calamine II.	from 10 to 15 per cent. zinc.

and the steriles as before.

The fine slime jiggers gave:

Galena	70 to 76 per cent. Pb.
Calamine I.	15 to 23 per cent. zinc.
Calamine II.	9 to 13 per cent. zinc.

with steriles containing 0·5 per cent. Pb. and 5 to 6 per cent. zinc.

The finer slimes were treated on Linkenbach tables, and the products were lead slimes with 50 to 60 per cent. Pb. and calamine slimes with 8 to 10 per cent. zinc, and 1½ to 2 per cent. Pb., and the steriles contained ½ to 1 per cent. Pb. and 6 to 9 per cent. zinc. Some of the slimes were enriched on percussion tables, and yielded 40 to 46 per cent. Pb. Considering the very slight difference in the specific gravities of the calamine and the dolomite gangue, the results are very satisfactory, while the cost of the whole milling operation was about 1s. per ton of the crude ore. The mineral is not touched by hand until it is finished with, while the products fall direct from the jiggers into tram wagons placed below. The last concentrating mill which we shall describe is one erected on the Luhrig system by the Luhrig Coal and Ore Dressing Appliances Company (Limited), at the Holzappel Mine at Laurenburg on the Lahn, Germany. It was erected in 1892, and as payment was to be made only from the difference in profits between the new system and those obtained by the old, the company must have been extremely confident of the results before they entered into the contract. Their confidence has, however, been justified by the results obtained, so that we may fairly take it that this system is one of the most modern and most efficient. The old plant consisted of an extensive hand-picking and sorting shed for the coarse stuff, while the machinery included breakers, fine and coarse crushing rolls, Schranz mills, jiggers, Saltzburger percussion tables, and rotating slime tables for treating the slimes classified in a spitzkasten. The arrangement was fairly continuous and automatic, the mills are situated near the River Lahn, which supplies water but not power. The water was used over and over again, and had to be classified before it was allowed to re-enter the river. The new plant was built on the hillside near the old, and some of the original buildings were utilised; the object was to treat not only the raw ore from the mine, but also to re-treat the old dump heaps, and accumulated slime tailings from the former plant. The ore was a complex one, consisting of galena, blende, and spathic iron with quartz and shale as a gangue, and the plant was designed to treat daily 93 to 100 tons of crude ore from the mine, 42 tons of old jig tailings, and 15 to 20 tons old slime tailings.

The ore coming from the mine is first broken in a stone breaker having jaws 16 inches by 28 inches, which crushes it to a 2 inch ring, and then passes on to a rotating picking table of 4½ metres diameter. Hoppers of ample capacity are placed below the table to receive the various products—clean picked galena and blende as well as the waste and the stuff requiring further dressing. The latter is run by tubs a short distance into the feeding hoppers of the smaller breakers on the top floor of the main building, containing the apparatus for crushing, sizing, and separating the stuff down to 4 millimetres. The dressing is done by two systems symmetrically arranged in this building, the one being slightly altered for the proper treatment of the old dump-heaps which are treated separately till they have been concentrated to a degree about equal to that of the raw ore, so that they may then pass into the process treating the mine ore. Four breakers, two large size revolving drums and picking tables of 3·5 millimetres in diameter, two pairs of coarse rolls, two separating drums, four pairs of fine rolls, and the corresponding two drums and elevators are so arranged with the 18 coarse jigs separating the stuff that the material is broken, picked, crushed, sized, and jigged by the machines standing on the different floors of the building, so as to pass the different sizes automatically and continuously from one to the other. The middlings from the different jigs either pass into the process again, or when poor are sent to the 20 stamp light battery, or if rich are treated by another fine rolls, and are sized and treated on five separate jigs. All these jigs are five compartments as, in fact, are all the jigs used. The sizes of trommel drum-holes in this building are 20, 16, 12, 9, 7½, 5½, 4 millimetres. The first 12 jigs stand on the first floor and discharge their various products into storage bins underneath (after being drained by running over a sieve) to be taken away from these when convenient, to be further dressed or sent to the stores. All the stuff under 4 millimetres size together with the pulp from the battery (crushing to about 1 millimetre) is separated in trommels down to ¾ millimetre, placed in the fine jigging building adjoining the main building, making the sizes 4 to 8, 3 to 1½, 1½ to ¾ millimetres. An hydraulic classifier receiving the pulp passing through the ¾ millimetre plate makes two more sizes for jigging, so that the system being double, there are 10 jigs supplied. These jigs stand on a platform, and the middle products from them are automatically retreated on 12 other jigs placed below, or if requiring further crushing run into an elevator pit to be passed back to the stamps on the higher level. There are also two jigs for hand feeding middle products of the lower jigs. Six Luhrig vanners take the richest slimes out of the pulp on this floor, while all the overflow water and the poor pulp are passed into a large hydraulic classifier outside the building for the purpose of classifying this water and returning it to the centrifugal pumps, which circulate it. The condensed slimes from the apexes of the pointed boxes forming this classifier are carried by a launder to the slime dressing machinery erected in the building of the old plant, and the necessary water for condensation is pumped up from the River Lahn. For this purpose ¾ cubic metre per minute is all that is required, and afterwards it is used for making up the fresh water supply for the plant, and for carrying the slimes with water to the lower mill. These slimes from the raw ore and the crushed dump heaps after passing through a check trommel to take out any coarse stuff, shavings, &c., that might accidentally have become mixed with them, are conveyed into hydraulic classifiers, and the different grades treated on Luhrig compound vanners which allow of treating the middlings of blende and galena, and of blende and gangue separately and automatically on the lower tables. The middlings from these are also continuously conveyed to other single vanners for retreatment. The treatment of the old slime tailings is carried on in the same manner after having been thoroughly mixed into pulp in a revolving Crickbom trommel. There are altogether 20 compound vanners and 24 single vanners in this building. The classifiers are all large, and their overflow is practically clean, and is at once used over and over again, passing on their way to the centrifugal pump through some of the settling tanks of the former plant. The nature of the ore makes the separation of the fine blende from the spathic iron ore extremely difficult, and more machines are required for thoroughly separating it than would have been the case if there had been no spathic iron ore present. The whole plant is laid out with the view to economy in treatment, and wherever practicable means have been found to pass on the middlings of the various machines for their further treatment without necessitating any hand labour. During the months of May, August, and September the amount of crude ore treated in the mill was 7521·4 tons, old dumps 2146·4 tons, and old slime tailings 1481·9 tons, while the concentrates obtained were 424·8 tons of galena containing from 65 to 60 per cent. Pb. and 2806·05 tons of blende with 40 per cent. zinc. The tailings from the mill contained only a trace of lead and an average of 2·75 per cent. zinc per ton. The cost of treatment, including labour, fuel, all material and repairs was 2s. 3d. per ton, as against 4s. 6d. per ton by the old system, while the small loss in the tailings is remarkable when the nature of the ore is considered.

Before closing this description we desire to call attention to the fact that the old jigger tailings which were thought rich enough to retreat in this mill contained 0·87 per cent. lead and 9·9 per cent. zinc on the average, while the old slime tailings contained 6·16 per cent. lead and 19 per cent. zinc. Practically the whole of the lead was recovered and two-thirds of the zinc. We have several times expressed our opinion that there are piles of tailings thrown away at our tin, lead, zinc, and copper mines, which it would pay to put through the mill again, and we feel sure that under favourable conditions as to situation and water supply, the whole cost should be considerably less than half-a-crown per ton. We have also frequently called attention to the shameful loss which occurs in tin dressing at our Cornish mines, where at least one-third of the tin is recovered from the rivers after it has left the mines, and we venture to suggest that the use of modern methods and modern machinery would do away with this loss, and convert it into profits to the advantage of the shareholders.

NOTES AND COMMENTS.

One of the most marked movements of to-day is towards the westernmost part of Australia, where hitherto unknown ground is being rapidly opened up. All the features which mark the gradual growth in the habitability and inter-communication of a new country are present in the more unoccupied portions of West Australian territory. Towns have rapidly grown up. Everything is moving with great speed. A word of caution may not, perhaps, be inopportune as to the rapid concentration of energy and attention in this quarter of the colonies. There is little danger of the boom ending in a fiasco and disaster, if only it be followed with the necessary caution. Something definite should be accomplished before all is risked. As evidence there is more weight in a plain record of what has been done than in all the prospectuses of a year taken together, and full of nothing but intentions for the future. Hell is not the only place that is paved with good intentions. There is something similar for those to walk on who pass through the bankruptcy court. So long as there is no insistance upon a far securer footway there will always be a great danger of ultimate ruin. Honesty—using the word in its broadest sense—in mining, as in other walks of life, leaves all other policies behind. For a time, the bolsterer-up of cranky mining ventures has a placid and prosperous time of it. If only it lasted a dexterous hypocrisy would in a temporal reference be the object of choice. The awakening comes, however, when all the unsound structures clatter down on the head of the originator in a way to make him almost a pitiable object.

Some particulars published in the *Australian Mining Standard* of Sydney concerning the more recent gold discoveries in South Australia may be of interest for purposes of comparison with the West Australian mines. First, in the richness of its ores, comes the old Mingary, or Lux, Mine. Here the stone is said to "rival the best from West Australia, the gold being easily seen in veins and solid specks throughout a reef 18 inches thick." Some highly encouraging reports of the mine have appeared in the "Mining Records of South Australia," by the Government Geologist:—"There are several quartz reefs on the property, ranging from 1 foot to 4 feet thick, already proved to be auriferous to a great depth. The various shafts exhibit large quantities of stone in which free gold can be discovered—payable if water can be obtained for treatment." The assays are conveyed in one sentence as having given, "cellular quartz, 3 ounces 5 dwts. gold per ton; ferruginous quartz, 1 dwt. 11 grains; ironstone, copper stained, 11 ounces 9 dwts. gold per ton, and in neither of these stones was there any gold visible.' It is needless to add that so promising a district has received its full share of consideration. One or two other mines are being worked in the district, among which mention may be made of the Queen Bee. These mines are located in a district known as New Luxembourg, and are within South Australian territory, not far from the border of New South Wales.

Some 25 miles from Petersburg, on the Broken Hill Railway line, is the locality of another rich find made a short time ago. The first assay—which was a lump broken away from a large piece of the stone—gave the phenomenal assay of 1740 ounces to the ton. Subsequent tests brought the results down to the more temperate figure of from 11 ounces to over 14 ounces per ton. Already a shaft has been sunk some 40 feet into a well-defined lode of stone closely similar to the samples tested. There are indications that some half a mile below the workings there is a continuation of the same lode. Pieces knocked off here at random yielded different assays from 1 ounce to 12 dwts. 16 grains respectively. The Nillinghoo and New Luxembourg Mines are among the other promising properties in the neighbourhood, where satisfactory progress is, in both cases, being made. This hopeful group of mines is the object of a good deal of attention at the present time, and the anticipations founded on the news continually coming to hand are very sanguine. Things move quickly in these districts, and a year or two may work a surprising change.

Colombian marble, by some accounts of it recently published, appears to hold its ground persistently against all other marbles in the world. The position of the quarries—almost midway between the northern and southern extremities of the New World—affords by its close connection with the railway and shipping systems of the Continent exceptional facilities for supplying the markets. The stone exists in a mass of almost inexhaustible magnitude, covering some 60 square miles, and rises to a height of fully 1000 feet above sea level among the mountains of the Sierra Nevada de Santa Marta. The magnitude of the marble deposit, however, is not its only advantage, for its value is said to be equal to that of any similar deposit in the globe. A short description of its nature, taken from the *Bulletin* of the Bureau of the South American Republic, is worth quotation, where the marble is charactised as "a beautiful crystalline metamorphic limestone, resembling in colour, texture, and chemical ingredients the celebrated statuary marbles of Carrara in Italy. The crystals are the most perfect cubes and others common to the calcium group, and the hardness of the stone is a little above the standard average of the Italian marble. In colour the stone is white, grey, black, white with black or blue veins, grey with black or white veins, white with pink veins." Beyond this, the stone is said to be of exceptional purity, so that under able management the quarries should prove a world-reputed success.

According to the usual mining report laid upon the table at the recent annual meeting of the British Columbia Board of Trade, the past history and the future prospects of the industry in that progressive district of the New World are such as to occasion much satisfaction. A modest but steady trade in coal, with an output running to the respectable total of 978,294 tons for 1893, is a good feature of the colony's commerce. San Francisco absorbs the greater part of the product at present, but there are indications that in the not distant future, when business improves and prices have risen, a wider area may be served by these collieries. The distinct advance of the figures already quoted upon the output of last year is itself an earnest of further expansion. Everything, so far as can be judged now, is working towards the establishment of a vigorous growth of operations. Cordial relations subsist at present between owners and miners, a wide recognition of the identity of both interests serving towards a maintenance of friendly co-operation. Nearly three thousand men are employed in the mines at a higher rate of wages than rules generally elsewhere. All that is needed to give an impetus to the trade is a keener demand for the mineral and it is not over hazardous to predict that for a period not far removed from to-day.

Relatively on a more unpretending scale, but important enough absolutely, the gold workings of the province claim their full share of attention. All that has been said of the coal industry as to the possibilities of future development can here be advanced with greater emphasis. That essential condition of successful mining, a good railway system, is in almost certain prospect. Hence the energy concentrated, and the capital embarked in this rapidly developing district. To convey the present mode of working to our readers a pithy sentence—a sort of nutshell description—may be quoted from the report:—"The mines are worked principally by sluices, but there are also some hydraulic workings, and in some mines, shafts and tunnels have been sunk. These different methods are carried to as high a pitch of working perfection as can be expected in the early years of a gold field." There is, however, no thought of stopping here. Methods by modernised machinery are in projection, and the results of the practical test of use in the country are being watched with an eagerness and interest founded upon personal hopes.

Silver, lead, and copper, as well as gold and coal, are in course of working. For the proper development of the two lower grade metals a plant will shortly be erected, comprising assay office and laboratory, roasters, concentrators, smelters, and refinery. Thus it will be seen that the modes adopted will have no "halfness" about them. Conveniently located, the plant, it is hoped, will perform its work in a manner calculated to convince mining men of its utility, and so stop in a large measure the exportation of ores. To show the growth of the industry, "in the East Kootenay district, 355 free mining certificates were issued and 347 mineral claims were recorded during the year 1893. Several of the discoveries in this district carry copper and silver, and it is probable that these copper ores will be mined

to advantage in the near future." As to the assays, 13 specimens from different mines in the West Kootenay district have yielded an average of 267 ounces of silver per ton and 58 per cent. of lead; from Slocan 17 samples have averaged 178 ounces of silver per ton and 61 per cent. of lead; while from Toad Mountain come reports of 444 ounces of silver to the ton and 23¼ per cent. of copper. Taking these samples to be fair average specimens of the products of these districts—as certainly they may be presumed to be—a happy history of successful working would seem to be awaiting British Columbia. Nothing but financial depression is responsible for the fact that the day of great things has not yet arrived.

OUR CITY ARTICLE.

FRIDAY EVENING.

THE MINING MARKET.

A quiet week all round.—But few active dealings in Kaffirs.—Chartered improve at the close. —Nine Reefs have a rise on good news.

THE Mining Market this week has displayed but little activity. If anything, the Indian and Miscellaneous section has been more prominent than the South African, though there has been no especial reason for this. The feature of the early portion of the week was the rise in the price of silver, but as it had a sudden fall at the close, we cannot congratulate ourselves too much upon this. Fortunately tin, lead, and copper have risen pretty sharply, bringing about a long hoped-for improvement in the mines producing these metals. At the close of the week Chartered in the South African section and Nine Reefs in the Indian were by far the most conspicuous. In the first place encouragingnews from Buluwayo brought about the improvement, and in the latter case a cablegram from the mine to the following effect:—"There is a great improvement in the south shaft. Pannings give good results. Think it is worth one ounce of gold per ton for two feet wide." It has been a very unfortunate week for diamond securities, the shares being dull and lifeless until Thursday, when a better feeling set in. Nevertheless, in spite of the week's slackness all round, the tone of the market is firm.

British Mines.

There has been considerable activity in the Cornish market during the past week, and at times the demand for shares was far in excess of the supply, and prices advanced rapidly. But with a check in the price of tin lower prices have been accepted. It is very evident that the speculators' feeling is not dead, and that with the chance of an ordinary price for tin, there are still many who think we may go further and fare worse than in Cornwall. Forking is going on fairly well at Dolcoath and some rich ground will soon be available. Carn Brea advanced to £10, but close easier at 8¼. East Pools have been firm all the week closing buyers at 8¾. South Crofty rose to 45s., but this induced free selling. Tincrofts from 11¾ advanced to 13½, and close buyers at 12. Wheal Grenvilles have changed hands rom 18¾ to 20¼, and finish at about 19.—Risen: Blue Hills, 2s. 6d.; Cook's Kitchen, 5s.; Dolcoath, 20s.; East Pool, 15s.; Polberro, 5s.; South Frances, 5s.; Tincroft, 10s.; West Frances, 10s.: West Kitty, 15s.; Wheal Agar, 10s.; Wheal Basset, 5s.; Wheal Grenville, 20s.—Fallen: Carn Brea, 5s.; and South Crofty 2s. 6d.

South African Shares.

The shares in this department of the market displayed much irregularity at the beginning of the week. On the whole, the gold shares were steady, but diamonds were somewhat weak, as also land shares. Jagers relapsed to the extent of ⅜, and De Beers ⅛. Amongst gold descriptions Henry Nourse, Ferreira, New Primrose, Glencairn, United Roodepoort, Heriot, Nigel, Robinson, and one or two others were prominent with rises of from ⅛ to ¼. On the other hand, Geldenhuis Estate, Wemmer, Jumpers, Durban Roodepoort, Meyer and Charlton, and Village Main Reef declined. There were no active dealings in Chartered, the shares falling 3d. Zambesia dropped to 2½. On the following day there was but little change exhibited, the market presenting rather a quiet appearance. Diamonds were again weak, Jagers going down 3-32, and De Beers to 15¼. But little change characterised dealings in gold shares. Meyer and Charlton and Metropolitan were firm at ⅛ advance, and Randfontein were 3d. better, but New Primrose and Henry Nourse were a shade easier. Chartered closed 6d. lower, but Bechs remained unchanged. On Wednesday the only noticeable feature was a recovery in Chartered, the shares closing at 9d. higher. The transactions in the other securities were devoid of any decided tendency, the prices on the whole keeping steady. Ferreira and Worcester were offered at a decline of ⅛ in each instance, but New Primrose were firm at 4 7/16, and Glencairn changed hands at 31s. 3d. City and Suburban relapsed to 14 11/16 and Henry Nourse to 3¼, but Jubilee recovered ⅛ to 5 3/16, and Langlaagte were picked up at an improvement of ⅛ to 2⅞. Wemmer rallied ⅛ to 4 1/16, the recent relapse in the quotation having attracted fresh buyers. Van Ryn were inquired for at 1 3/16, and Croesus and Geldenhuis Main Reef were slightly higher at 1¼ and 9s. 6d. May Deep Level were bid for at 9s. 6d., without meeting with any sellers, but East Rand receded 6d., to 12s. 3d., and Spitzkop after being bid for at 7s. 3d., left off at 6s. 10½d. Diamonds were again weak. Thursday witnessed a few more active dealings in certain specialities. Chartered advanced on encouraging news from Buluwayo, the shares closing with a rise of 9d. on the day. Diamond shares took a turn for the better, both Jagers and De Beers improving ⅛. In the Kaffir section Spitzkop were conspicuous with a rise of 1s. 6d. Van Ryn improved ¼, and Meyer and Charlton were advanced a further stage. On the other hand, Jumpers reacted ⅛, whilst Luipaard's Vlei fell 1s. 6d., and United Langlaagte 1-32. To-day the features have been Chartered, which at one time reached 34s. 9d., but closed at 34s. 3d., and Spitzkop, which had a sharp rise of 5s. The tone of the other shares is steady. —Risen: African Gold Recovery, 3s. 9d.; Afrikander, 1s. 3d.; Alexander Estate, 6d.; Champ d'Or, 2s. 6d.; Chartered, 6d.; Consolidated Deep, 2s. 6d.; Crown Reef, 2s. 6d.; Ferreira, 5s.; Geldenhuis Main Reef, 1s.; George and May, 2s. 6d.; Glencairn, 6d.; Heriot, 2s. 6d.; Jubilee, 5s.: Lisbon, 3d.; Metropolitan, 3s. 9d.; Meyer and Charlton, 5s.; New Princess, 2s. 6d.; Nigel, 1s; 3d.; Spitzkop, 5s.; United Roodeport, 1s. 3d.; Van Ryn, 5s.; Witwatersrand (Knight's), 6d.; Worcester, 1s. 3d.—Fallen: African Consolidated Land, 6d.; Bantjes, 6d.; Barrett's, 3d.; Central African Zoutpansberg, 9d.; City and Suburban, 2s. 6d.; De Beers, 5s.; East Rand, 6d.; Gold Fields of Mashonaland, 2s. 6d.; Gordon Diamond, 6d.; Johannesberg Water, 1s.; Jagersfontein, 7s. 6d.; Jumpers, 2s. 6d.; Langlaagte, 2s. 6d. Luipaard's Vlei, 1s. 6d.; Mozambique, 1s. 3d.; Oceana, 2s. 6d.; Sheba, 6d.; South African Gold Trust, 1s. 3d.; Southern Land (fully paid), 6d.; Stanhope, 2s. 6d.; Transvaal Gold, 1s. 3d.; United Langlaagte, 1s. 3d.; Wemmer, 5s.; Zambesia, 2s. 6d.

Indian and Miscellaneous Shares.

At the opening of the week, with the exception of Indians, the Miscellaneous market exhibited no change. Indians were inclined to weaken, Balaghat falling 3d., Ooregum ⅛, and the Preferred ⅛. Copper shares, on the better outlook for the metal, advanced, Cape Copper rising ⅛ and Rio Tinto ⅛. On the following day the rise in silver had no effect upon silver mines. Nothing of importance was transacted in any of the other shares, Indians being especially dull. Copper shares were again firm. On Wednesday, however, a harder tone was observable amongst miscellaneous descriptions, the silver shares especially displaying strength and vigour. Broken Hill closed at 62s., or 2s. higher; Tolima A rose ½, and Tolima B ¼. Fortuna rallied ⅛. Amongst other securities, Aladdin relapsed ⅛, but Champion Reef recovered that figure. Both Ooregums also advanced, the Preference ⅛ and the Ordinary ⅛. Mysore Gold rose ⅛, and Mysore Wynaad 6d. Amongst copper shares, Rio Tinto reacted ⅛, but Quebrada improved ⅛. On Thursday a sharp fall in the price of silver had a depressing effect upon Broken Hill Props., which lost as much as 2s. Amongst Indians, Nine Reefs was again the feature of the day, on the receipt of a favourable cablegram, the contents of which were not known, however, until after business hours. The quotation for the partly-paid finished at 4s. 3d., an advance of 2s. 6d., the fully-paid gaining to a similar extent. The only other movements in Indians were a rise of 6d. in Mysore West, and a fall of an equal amount in Mysore Reef. Rio Tinto dropped ⅛. Other miscellaneous shares were quiet and unchanged. To-day Nine Reefs have again been the feature, the partly-paid shares closing at 4s. 6d., and the fully-paid advancing 6d.—Risen: Alaska, 1s. 3d.; Argentine Concession, 3d.; Australian Broken Hill, 3d.; Bayley's Reward, 1s.; Broken Hill Props., 1s. 3d.; Copiapo, 3s. 9d.; Day Dawn P.C., 6d.; Fortuna, 2s. 6d.; Golden Leaf, 6d.; Kaboonga, 3d.; Kangarilla, 1s.; Kempinkote, 3d.; Libiola, 2s. 6d.; Linares, 7s. 6d.; Mill's Day Dawn, 1s. 3d.; Mysore, 1s. 3d.; Mysore West, 1s.; ditto Wynaad, 6d.; Nine Reefs (9s. 6d. paid), 2s. 6d.; ditto (fully-paid), 2s. 6d.; Quebrada, 2s.; Ripanji, 1s.; Rio Tinto, 7s. 6d.; Springdale, 3d.; Tolima A, 10s.; ditto B, 5s.; West Australian, 5s.—Fallen: Aladdin's, 1s. 3d.; Day Dawn Block, 6d.; Elkhorn, 6d.; Harquahala, 6d.; Mosman, 1s.; Mysore Harnhalli, 3d.; Ivy Reefs, 1s.; Ooregum, 2s. 6d.; ditto Preference, 2s. 6d.; South East Mysore, 3d.; Sierra Buttes (Plumas Eureka), 1s. 3d.; Waihi, 1s. 3d.; West Argentine, 3d.; Wentworth Ordinary, 6d.

STOCK EXCHANGE SETTLING DAYS.

Settling Days on the Stock Exchange are as follow:—

CONSOLS, Monday, September 3.

STOCKS AND SHARES.

Continuation Days.	Ticket Days.	Pay Days.
Tuesday, August 28	Wednesday, Aug. 29	Thursday, Aug. 30
Tuesday, Sept. 11	Wednesday, Sept. 12	Thursday, Sept. 13
Wednesday, Sept. 26	Thursday, Sept. 27	Friday, Sept. 28

DIVIDENDS ANNOUNCED.

Brilliant Block, 9d. per share.
Brilliant Central, 3d. per share.
Brilliant Gold, 3d. per share.
Brilliant S. George 3d. per share.
Broken Hill Proprietary, 1s. per share.
Colombia Gold (Venezuela), 7s. 11d. per share.
Kelly's Queen Block, 9d. per share.
Phœnix Golden Pile, 9d. per share.
Queen Central (C. T.), 3d. per share.
Tolima A and B, 10s. per share.
West Kitty, 3s. per share.
Anglo Californian Bank, 7 per cent.
Aspinall's Enamel, 4s. per share.
Astley and Tyldesley Coal and Salt, £3 per share.
Astley and Tyldesley Coal and Salt, New Shares (£80 paid), £2 8s. per share.
Barnet Gas and Water A and C stocks, 9 per cent.
Barnet Gas and Water B stock, 8 per cent.
Barnet Gas and Water D stock, £6 6s. per cent.
Bent's Brewery, 5s. per share.
Birmingham and Midland Tramways, Pref., 5 per cent.
Birmingham Small Arms and Metal, 10s. per share.
Boddingtons' Brewery, 8 per cent.
Brandy Distillers (Limited), 10 per cent.
Chicago, Burlington, and Quincy Railway, 1¼ per cent.
Civil Service Supply Association, 12s. per share.
Cockermouth, Keswick, and Penrith, 3½ per cent.
East and West Yorkshire Union Railways, 2½ per cent.
Harrington's, 4½ per cent.
Indemnity Mutual Marine Assurance, 5s. per share.
John Hunter Wiltshire and Co., 5 per cent.
London, Deptford, and Greenwich Tramways, Pref. Ord., 2 per cent.
London, Paris, and American Bank, 3 per cent.
Mason and Mason, 2 per cent.
North Staffordshire Tramways, 4½ per cent.
North Staffordshire Tramways Pref., 6 per cent.
Osset's Gas Company A, 10 per cent.
Osset's Gas Company B, 7 per cent.
Rhondda and Swansea Bay Railway Pref., 3 per cent.
Springfield Breweries, 10 per cent.
Springfield Breweries Pref., 8 per cent.
Royal Bank of Queensland, 2½ per cent,
Smedley's Hydropathic (Matlock), 7½ per cent.
Western Australian Bank, 17½ per cent.
York Tramways, 6 per cent.
Orion Gold Mining Company, 10 per cent.

ON Monday an important conference of Yorkshire owners and men's representatives was held at Sheffield to consider the question of reduction of the wages of surface men and pit lads, but no settlement was arrived at. The officials of the Yorkshire Miners' Association have advised the pit lads at several South Yorkshire collieries to continue working pending a decision of the Conciliation Board

THE last stage in the settlement of the disputes that have upset the coal trade in North Staffordshire, consequent upon the introduction of the conciliation scheme, has been reached by the withdrawal of the Midland Coal, Coke, and Iron Company, who employ from 2000 to 3000 hands, from the position they took up, and by their agreeing to the conciliation scheme, reserving several points for arbitration. A mass meeting of the men on Tuesday decided to return to work on Wednesday.

ZINC ORE SEPARATING PLANT AT MONTEPONI, SARDINIA.—An interesting illustrated article on the above is commenced this week in *Engineering*.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

BAYLEY'S REWARD.—The following cable, dated 21st inst., has been received by the London office:—"700 ounces, 75 tons."

BRILLIANT BLOCK.—The directors have received the following cablegram from the head office in Charters Towers:—"Have crushed during the fortnight 1157 tons of quartz, yielding 1004 ounces of gold. The profit on the fortnight's run is £1700. Have declared the usual monthly dividend of 9d. per share, payable September 7." The approximate value of this return is £3450.

BRILLIANT CENTRAL (C.T.) —Cablegram 22nd inst., Brisbane:—"Crushed 283 tons for 426 ounces, and declared a dividend of 3d. a share."

BRILLIANT AND ST. GEORGE UNITED. — Cablegram dated August 20: Crushed 400 tons for 670 ounces. Dividend 3d. a share.

BRILLIANT GOLD. — The following cablegram has been received from Charters Towers:—"2170 tons, yielding 1980 ounces. Dividend (the 51st) 3d. per share."

CRAVEN'S CALEDONIA GOLD MINING.—The following cablegram has been received, giving result of crushing for past fortnight, dated Charters Towers, August 20:—"200 tons, yielding 305 ounces gold. Partial clean up."

EASTLEIGH MINES.—A cablegram has been received from this company's office in Pretoria as follows:—"The result over plates (20 stamps running) and cyanide extraction gave 750 ounces for July; 60 stamps, newly erected with adequate cyanide plant, have started."

EL CALLAO.—Messrs. Baring Brothers and Co. (Limited) have received the following telegram from El Callao Mining Company:—"401-425 ounces of gold produced by El Callao Mine for the past fortnight, and 926-950 ounces by the Colombia Mine."

ELKHORN. — Bullion produced in the mill for the week ending August 18, 8500 ounces.

FRONTINO AND BOLIVIA. — For the month of June: Produce value, £7892 17s. 7d.; cost, £5996 15s. 10d.; estimated excess of returns, £1896 1s. 9d.

GOLDEN GATE.—The manager cables:—"Present depth of diamond drill bore from surface, 1250 feet. Indications are favourable for cutting a vein."

ISLE OF MAN.—The secretary sold on Saturday last 100 tons of this company's ore at £8 per ton.

JAY HAWK AND LONE PINE CONSOLIDATED.—The directors have received the following telegram from the manager, viz.:—"The returns show 7000 ounces for the week. We have cut the lode in the 1600 feet level, good ore."

KABOONGA.—The following cable has been received from the manager at the mine:—"Reef wash at present not good enough; is likely to improve. I am pushing ahead."

KELLY'S QUEEN BLOCK.—Cablegram, August 20: Crushed 280 tons for 780 ounces. Dividend 9d. a share.

KOFFYFONTEIN.—Cable advices have been received from the general manager, to the effect that the first of the three new washing gears started work on Monday last.

LAS CABESSES MANGANESE.—Production for the week ending August 18 (six working days), 576 tons, or a daily average of 96 tons. Not all miners at work on account of the Assumption holiday.

MASHONALAND CENTRAL.—By the incoming mail the London office has received from their head office the following cablegrams which Mr. F. Johnson has sent them:—"Energetic development; Concession Hill giving most satisfactory results along entire line of claims. Three distinct parallel reefs proved; two new lodes struck last week bottom of old workings, both very rich visible, panning over 1 ounce."—"Just returned from Concession; cross cut through upper reef completed; width between slate walls 21 feet, carrying over 1 ounce free gold. Sending samples fire assay; driving adit lower reef, opened four places 3 feet wide, worth about 15 dwts. North leader close, lower reef 15 inches wide, carries nearly 3 ounces free gold, solid; increasing size at 20 feet. Getting out stone for trial crushings, sinking to strike middle reef, float very rich; struck leader upper reef eastern end 12 inches, carries very heavy visible. Cleme's doing excellent work. Large number rushing concession on account of our finds. Stopped Salamander work; concentrated all concession till Beatrice pump arrives."

MATABELELAND ADVENTURERS.—The directors have received a cablegram from Buluwayo mentioning that 200 auriferous claims have been acquired for the company by their representatives there. Prospecting operations will at once commence.

MOUNT LEYSHON.—The following cablegram, dated 21st inst., has been received from the manager at Charters Towers, giving the fortnightly crushing:—"91,100 tons crushed; 185 ounces gold; 40-stamps mill ran—days. Loss, £30."

NEW LOUIS D'OR (Main Reef).—The directors have received a cablegram from the new mine manager, Mr. Hill, as follows:—"You have a most valuable property."

NEW QUEEN.—The following cablegram has been received, dated Charters Towers, August 18, giving result of crushing for past fortnight:—"No. 1 formation, 255 tons, yielding 330 ounces gold; No. 4 formation, 79 tons, yielding 62 ounces gold. Stopped crushing No. 4 formation for one week."

NINE REEFS.—The directors have received the following telegram dated August 23, from the mine:—"There is a great improvement in the south shaft. Pannings give good results. Think it is worth 1 ounce of gold per ton for 2 feet wide.

PHILIPPINES MINERAL SYNDICATE. — The directors have received the following telegram from the mines:—"Successful opening quartz mills August 15."

PHŒNIX GOLDEN PILE.—Messrs. Burkett, Munro, and Company have received following cablegram, dated Brisbane, 22nd inst.:—"Crushed 336 tons for 705 ounces, and declared a dividend of 9d. a share."

QUEENSLAND CARATAL.—We are informed by the secretary that a cablegram has been received from the engineer, sent out to examine the Mount Orient Mine, as follows:—"I have great pleasure in stating that I have, after an exhaustive examination, found the mine to be in every way as represented."

QUEEN CENTRAL (Charters Towers).—22nd inst.:—"Crushed 155 tons for 480 ounces, and declared a dividend of 3d. a share."

RAVENSWOOD GOLD.—The following cablegram has been received from the general manager at Ravenswood:—"Have crushed 23 tons of stone from the Black Jack Mine for 79 ounces of gold, worth £280. The lode is opening up well."

WENTWORTH EXTENSION.—Cable dated August 23:—"Good progress is being made; think we are in close contact with vein."

SPITZKOP.—The directors announce that a cablegram has been received, giving notice of shipment of gold valued at about £2265 from the hydraulic clean up. Full details are shortly expected by mail.

WASSAU (Gold Coast).—The produce of the mine for the month of June last realised £1445 11s. 9d., being 371 ounces standard. The mill worked 20 days 8 hours, and crushed 305 tons of ore, giving a yield of 1 ounce 4 dwts. standard per ton. Cablegrams have since been received advising the remittance for last month as 331 ounces bullion, and a yield of 1 ounce 3 dwts. per ton.

MINING NOTES.

HOME, COLONIAL, AND FOREIGN.

THE correspondent of the *Western Mail*, writing from the Murchison, says:—"Returning from the island to Day Dawn I visited Ainsworth's Claim on the Mainland. This claim, named the Mainland Consolidated, is comprised of two leases, the Last Chance and the Mainland, and might well be called the Bayley's of the Murchison. Whilst there I was shown 18 lbs. of stone, which was estimated to contain 120 ounces. Five shafts have been sunk on the Last Chance, one 70 feet and another 50 feet, and three levels now giving 700 feet of drifts. The average width of vein is about 2 feet; but in some places it widens to 9 feet. There are about 7000 tons of 5 ounces ore ready for stoping; 100 tons are lying at grass, and a parcel of 12 tons recently crushed yielded 10 ounces to the ton. The Mainland has two shafts sunk to a depth of 50 feet, and 150 feet of levels have developed 2000 tons ready for raising that will yield 5 ounces to the ton; 10 tons have recently yielded 52 ounces, and 11 tons were crushed for 77 ounces. During the past five months about 50 tons of picked stone have been crushed for 681 ounces. Previous to the erection of the three-stamp battery some 4500 ounces were dollied from the stone raised."

ONE hundred and one tons from the Jubilee No. 1 North returned 90 ounces of smelted gold. This return is an important one, the reef in the mine averaging 7 feet. The gold is of good value, and every piece of stone broken is crushed, yielding from 13 dwts. to 1 ounce to the ton. At present only a few men are employed, which is a pity, as in both this mine and the Jubilee P.C. there is enough stone in sight to keep a 10 head battery going. These claims are even now worked at a profit, but with a battery capable of reducing say 100 tons a week, employment would be found for a number of men, the profits to the shareholders materially increased, and the Twelve Mile once again spring into a busy and prosperous township. We, the Croydon *Mining News*, have long held the opinion that the Twelve Mile would ultimately become an important gold producing district, and if those who own payable mines such as the Jubilee would but take steps to obtain sufficient crushing power to bring the cost of treatment to a minimum they would increase the value of their own properties and encourage others to work the large reefs in the locality, some of which will undoubtedly leave a fair margin for profit if worked on a large scale.

THE British South Africa Company has communicated to Reuter's Agency the following extract from its mail letter, dated Cape Town, August 1, 1894:—A reef 5 feet wide, carrying a fair quantity of visible gold, and panning well and regularly, has been struck in No. 3 adit on the Rezende Reef, Manica belt, 180 feet from the mouth. A reef 8 feet wide has been struck on the Maggie property. Major Johnson is in, and gives good reports of Concession Hill, on the Mombi River. The great Balingwe Reef, belonging to Stoddart, in Balingwe district, is turning out very well. It has an average width of 8 feet, can be traced throughout 20 claims, carries very fair and very even gold along the whole length. It is in excellent position for working, being on the top of a high hill, with very abrupt slopes. There is abundance of timber on the hills, and there is good water power below reef. Several properties within a radius of 20 miles of Buluwayo are turning out very promising. There are many claims on the Buluwayo commonage on which they are getting visible gold, and the stone of which pans well. The reports from all the districts are most encouraging. The following are some results obtained from samples carefully taken:—Imbenbezi, 15 miles south-east, ore taken from 30 feet, width of reef 7 feet, result, 15 dwts.; the Eland, 17 miles south-east, depth of shaft 30 feet, width of reef 4 feet, result 12 ounces (this is so high that the reef must be sampled again, or they must have a very rich bunch); the Pink 'Un shaft, 30 feet, width of reef 2 feet, result 1 ounce 10 dwts. (this is close to the Eland); Congo reef, 1¼ mile from township, shaft 30 feet, width of reef 2 feet, result 10 dwts.; Consort reef, 2 miles from town, shaft 18 feet, width of reef 18 inches, result 1 ounce 15 dwts.; the Pacific reef, 1 mile from town, just commenced to sink surface, width 2 feet, average value 17 dwts.; the Hecla reef, on Commonage crosscut, exposing reef 18 inches to 2 feet, average value, 1 ounce.

THE *Inquirer* of July 20 reports a rush to a new alluvial find about 18 miles south of Coolgardie, where gold is being found in plenty. There has also been a rush to a spot 20 miles north-east of Coolgardie; but reliable reports as to results have not yet come to hand.

A LARGE supply of water has been struck at a depth of 134 feet, 12 miles east of Woolgangie, on the Southern Cross Road, and 42 miles from Coolgardie. Twenty-four feet of water are standing in the drill hole. It is intended to pump from the bore pending the sinking of a well.

IT is reported that Brophy and party have struck rich gold in their reef at Kurnalpi. At 40 feet in depth they struck stone that is represented as being nearly pure gold, and the richest ever found in these parts, the specimens taken from the reef being even more sensational than any from Bayley's or the Londonderry.

THE following are the gold statistics for the Bendigo and Ballarat districts for the past fortnight:—Bendigo: Total yield 6500 ounces; dividend declared, £5525.—Ballarat: Total yield 7139 ounces; dividend declared, £4050.

THE Fife and Kinross Miners' Association paid £4000 on Tuesday as strike pay; the amount received by the men is 12s. per week, with 1s. extra for each child. During the last eight weeks the Scotch coal exports have fallen off 1,025,000 tons; the shipments from all ports during last week were the smallest ever recorded.

INFORMATION was received in Birmingham on Wednesday that the National Conference of miners adjourned from Newcastle-on-Tyne to that city has been adjourned till November next. The object of the conference was to secure joint action between Durham, Northumberland, South Wales, and other districts and the Federation of Great Britain, with a view to protect labour interests and prevent wages receding.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

Leadhills Silver-Lead Mining and Smelting Company.

The directors' report to be submitted to next Wednesday's meeting is as follows:—We beg to submit a statement of accounts for the 12 months ending the 30th of June last, and though we regret to have to record a loss of £116 4s. 9d., we think it subject for congratulation, that with lead lower than during any previous year of the company's existence the loss has been so small. In our report of September last, when we had to announce a loss of £2173 for the 12 months ending June, 1893, we stated that "Latterly a considerable reduction has been effected in the expenditure which will benefit the company this year," and we are glad to point to the justification of this remark in the result now recorded. The results of the work during the past year are: Ore broken, 1901 tons; ore dressed, 1775 tons; ore smelted, 1751 tons; pig lead made, 1376 tons; pig lead sold, 1055 tons. A slight increase in the ore broken and dressed. A considerable quantity of exploratory work has been done in the year, some £1140 having been expended on sinking Jeffrey's and Wilson's shafts and driving the 160 fathom level, and the crosscut towards Raik vein at the 100, operations agreed to be carried out in consideration of the royalties being waived, but so far little fresh ore ground has been laid open by it. The 100 fathom level south of Wilson's shaft was disappointing, as the ore in the 85 and upper levels did not hold down to it. The resident manager's report is submitted, and gives details of the work carried out. The prospects of the lead market in this country have, we think, been considerably improved by the passage of the United States Tariff Bill, and prices have risen some 17s. 6d. a ton from the lowest, viz., from £9 2s. 6d. to £10. We hope for and expect a further rise, the benefit of which we should feel both on our stock and our current returns, so we trust the year, now commenced, may prove more satisfactory than the past.

Mount Morgan Gold Mining Company.

In their ninth annual report the directors state that the amount expended for the year shows a decrease of about £10,000. The item wages is less, but the items stores and material and machinery and buildings are more. These increases are caused by new plant for treatment and timber for mining. Mining, to which has to be added prospecting, costs more than formerly, and were it not for a considerable reduction in the cost of treatment, the expenditure would be much heavier than it is. The profit and loss account for the year shows a balance of profit of £1164.

Frontino and Bolivia Gold Mining Company.

The directors have received advices from the mines, dated 7th June (which were delayed in transmission), 23rd June and 6th July, also a letter from Messrs. Restrepo dated 12th June. The particulars of the produce for May, 1894, which were not to hand when the last circular was issued were as follows:—2740 tons produced, bar gold, 3302 ounces; tributers' gold produced, bar gold, 118 ounces; total 3420 ounces. Also 57,545 lbs. of sulphurets, valued at £1467 9s. 7d. The statement for the month of June is as follows:—3629 tons produced, bar gold, 2372 ounces; tributers' gold produced, bar gold, 230 ounces; total 2602 ounces. Also 55,012 lbs. of sulphurets, valued at £1482 3s. 7d. Estimated value of the gold and sulphurets, £7892 17s. 7d.; cost at the mines, Medellin, and in London, £5996 15s. 10d.; estimated excess of returns £1896 1s. 9d.

The Tolima Mining Company (Limited).

The directors of this company will pay, on the 21st day of September proximo, a dividend of 10s. per A and B share to the shareholders as they stand on the register on the 7th proximo, being the third interim dividend of 10 per cent., making 30 per cent. for the year 1893.

— The directors of the VICTORIA AND QUEEN GOLD MINING COMPANY have made a call of 1s. per share, payable on September 7th.

NEWS FROM THE COLLIERIES.

NOTES ON THE INDUSTRY.—STATISTICS AND REFERENCES.

A MEETING of the coal owners' and miners' representatives of Leicestershire was held on Monday to consider the terms arranged by the Conciliation Board. A long discussion ensued, after which the men retired in order that the owners might arrive at a decision. Ultimately the following resolution was handed to the miners by the masters, viz:—"That we abide by the arrangement made at the Conciliation Board and take off one-fourth of the advances given since 1888, which has already been carried out by the majority of the collieries in the Federation. This arrangment does not apply to day wage boys. Having been informed by the miners' representatives that another meeting of the Conciliation Board has been arranged, we agree to abide by any modified terms, should any be decided upon." The representatives of the men expressed themselves as dissatisfied with this resolution, and asked the owners to postpone any decision until after the Conciliation Board had decided the matter in dispute, but they refused to do so. The miners contend that the day wage men and shifters have not had more than 30 per cent.

THE return of the Scottish miners to their original demand for 1s. advance has strengthened their position. The ninth week of the strike commenced on Monday, and very few miners were working. The coal masters still appear determined not to yield. Inquiry shows that there is great distress among the strikers and their families, but soup kitchens and relief funds have staved off actual starvation. In the iron districts, many men are idle because of the coal strike, and their exasperation is such that conflicts between the colliers and themselves are feared in some quarters. Some doubt is expressed as to whether the English miners will continue their levy, seeing that the Scottish colliers have rejected their advice to make a compromise. Influential persons are still invoking the interference of the Board of Trade.

THE following resolution has been unanimously carried by the members of the Dunston Lodge of the Durham Miners' Association:—"We, the members of the Dunston Lodge of the D.M.A., having considered the circular issued, *re* the formation of a Conciliation Board, believe the time has arrived when some conciliatory means should be devised for the adjustment of wages, but strongly protest against any scheme of conciliation for the regulation of our wages which does not include in its rules a minimum basis rate for our future guidance."

THE Bearpark Lodge of the Durham Miners' Association have passed the following resolution:—"That we, the members of the above lode of the D.M.A., having considered the circular *re* the forming of a Conciliation Board, most emphatically protest against the formation of any board for the regulation of the wages of the miners of Durham on the present basis—namely, a living wage of 4s. 2d.; but we request that the county demand that the minimum wage be 5s. to form a basis before such a board is formed.

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET—LONDON, AUGUST 24.

Copper.

THE speculative market was active again this week, and prices rose nearly £1 over last week's close, £40 10s. being reached on Wednesday, but the American market has not turned out so good as had been anticipated, and some of the producers there have taken lower prices for large quantities, and have made low offers to Europe. This, chiefly, was the cause of the relapse which has taken place from the best above named. Consumers' and manufactured copper, which had advanced in price, have also declined again for the same reason. The following is a sketch of the course of business in the G.M.B. market this week. On Monday the tone was strong, and business was done at £39 17s. 6d. and £40 s.c. On Tuesday there was a considerable increase in speculative demand, and a large turnover (about 1250 tons) was the result, whilst values improved to £40 5s. and £40 12s. 6d. s.c and three months respectively. Spot changed hands late in the day at £40 2s. 6d., but £40 5s. was again paid on Wednesday, and £40 10s. on Thursday, the transactions on each day amounting to 1000 tons or so. £40 10s. proved to be highest of the week, numerous selling orders coming out at this point, and depressing the value to £39 17s. 6d. at Thursday's close. To-day a fall to £39 12s. 6d. s.c. was followed by a recovery to £39 17s. 6d., and we close steady at £39 17s. 6d. to £39 18s. 9d. s.c. and £40 5s. to £40 6s. 3d. three months. For Chili regulus 8s. has been paid,

Tin

The course of this market on Monday was strongly upward, and considerable buying was done at advancing prices, spot changing hands at from £70 17s. 6d. to £71 12s. 6d., and three months at from £71 up to £72 5s. On Tuesday morning £72 2s. 6d. was done for s.c., but from this point values fell back in consequence of somewhat heavy sales to £71 10s., and in the course of Wednesday and Thursday to £70 2s. 6d.,—15s. below the opening price. The sales emanated chiefly from the Straits, but speculative demand here continued good until Thursday, when a decline in silver, and lower offers from the Straits, combined to depress the market as shown above. To-day three months declined from £70 7s. 6d. to £70, and at one moment both spot and three months were dealt in at the same price. The market closes dull at £69 15s. to £69 17s. 6d. s.c., and £70 to £70 5s. three months. In the Dutch market, Billiton opened at fl 42⅜ s.c., and fl 43 three months, rose to fl 43¼ and fl 43⅜ respectively, and then gave way from day to day, closing at fl 42⅜ s.c. and fl 42⅛ three months, with Banca at 43¼ fl.

Pig Iron.

Scotch shipments last week were only 1456 tons, as against 4932 tons for the corresponding week of last year. The Glasgow market opened with a strong advance s.c., Scotch touching 43s. 7½d., but the movement was not maintained and prices receded again until 43s. 2d. had been done — viz., on Wednesday. On Thursday there was a recovery to 43s. 6½d., followed by a fresh relapse to 43s. 3½d. To-day business was done at 43s. 6d. to 43s. 3½d., and the market closed dull at 43s. 3½d. sellers, with hematite at 44s. 5½d., and Cleveland at 36s. 2d. The coal strike is greatly restricting production in Scotland, and the stocks of Scotch on warrants continue to decrease.

Lead

has continued to improve, and closes steady at £10 1s. 3d. to £10 2s. 6d. soft foreign, and £10 2s. 6d. to £10 5s. English.

Spelter

has also advanced further in price. Last week closed at £15 10s., but sellers now ask £15 13s. 9d., and the tendency is very steady. The closing quotations are £15 12s. 6d. ordinaries, and £15 15s. specials.

Antimony

continues steady at £32s to £33 without new feature.

Quicksilver

steady at £6 5s. firsts, and £6 3s. 9d. to £6 4s. seconds.

The following are to-night's (August 24) prices of metals;—

	£ s. d.	£ s. d.
Copper.		
Tough cake and ingot	42 5 0	42 15 0
Best selected	42 15 0	43 10 0
Sheets and sheathing	—	51 0 0
Flat bottoms	—	54 0 0
Chili bars		
Good merchantable, spot, & 3 months respectively	39 17 6	40 5 0
Copper tubes, seamless	—	0 0 7½
Alloys.		
BRASS: Wire	—	0 0 5¼
,, Tubes (solid drawn)	—	0 0 6¼
,, Sheets	—	0 0 5¾
PHOSPHOR BRONZE: Alloys II.	—	78 0 0
,, ,, III. or V Cog Wheel Brand	—	81 0 0
,, ,, VII.	—	83 0 0
,, ,, XI.	—	78 0 0
,, ,, Vulcan brand A1	—	72 0 0
DUBO METAL	—	72 0 0
BULL'S METAL	—	65 0 0
Ferrobronze (Vivian's).		
Ingots per lb.	0 0 5¾	—
Ordinary sheets, plates, bolts and bars	0 0 6¾	—
Screw bolts and nuts	0 0 7¾	—
Pump rods, plain	0 0 6¾	—
,, finished	0 0 9¾	—
DELTA METAL: No. 4 (per ton)	—	73 10
,, Sheets and plates (per lb.)	0 0 10¼	—
,, Bars, round, square, flat (per lb.)	0 0 9¼	—
,, ,, hexagon (per lb.)	0 0 9	—
Tin.		
English, ingots, f.o.b.	72 5 0	73 5 0
,, bars	73 5 0	74 5 0
,, refined	74 5 0	75 5 0
Straits, spot and 3 months respectively	69 15 0	70 0 0
Australian spot, and three months respectively	70 5 0	70 10 0
Banca ,, (in Holland)	74 0 0	74 5 0
TIN PLATES: Charcoal, best quality per box	0 14 0	0 15 0
,, ,, ordinary	0 11 6	0 12 6
,, Coke, best quality	0 10 9	0 11 3
,, ,, ordinary	0 10 3	0 10 6

These prices of tinplates are f.o.b. at business; at Liverpool 6d. per box more.

Iron.		
Pig, G.M.B., f.o.b., Clyde, spot	—	2 3 4
,, Scotch pig, No. 1 Gartsherrie	—	all nominal
,, ,, Coltness	—	
,, ,, Clyde	—	
,, ,, Govan	—	
Bars, Welsh, f.o.b. Wales	—	5 2 6
Plates ,, ,,	—	6 0 0
Bars, Staffordshire, at works	—	5 10 0
Sheets ,, ,,	—	6 5 0
Plates ,, ,,	—	6 5 0
Hoops ,, ,,	—	5 12 6
Ship plates, Middlesborough	—	4 15 0
STEEL: English spring according to quality	10 0 0	22 0 0
,, ,, cast	42 0 0	60 0 0
,, Rails at works, according to section	3 12 6	4 15 0
Lead.		
Spanish or soft foreign	10 1 3	10 2 6
English pig, common	10 2 6	10 5 0
,, L.B.	—	10 10 0
,, sheet and bar	—	11 0 0
,, pipe	—	11 10 0
,, red	—	12 5 0
,, white	—	16 10 0
,, patent shot	—	14 10 0
Spelter.		
Silesian ordinary brands	—	15 12 6
,, special brands	—	15 15 0
English Swansea	—	16 5 0
Sheet Zinc	18 15 0	19 0 0
Antimony.		
Antimony	32 0 0	33 0 0
Quicksilver.		
Flasks, 75 lbs. warrants	6 3 6	6 5 0
Manganese.		per unit.
Ore, c.i.f., U.K. ports		
1st quality, 50 per cent. and upwards	0 0 10½	0 0 11
2nd ,, 47 per cent. to 50 per cent.	0 0 9¾	0 0 10¾
3rd ,, 40 ,, 47 per cent.	0 0 8	0 0 10
Aluminium.		Per lb.
98-99½ per cent. (guaranteed 98 per cent. min.) in ingots (1 cwt. lots)		0 1 9½
do do (1 ton lots)		0 1 9
Nickel.		
98-99 per cent. guaranteed	1 0¾	0 1 7¾

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay*, Antimony; *A*, Arsenic; *Bl*, Blende; *Bx*, Borax; *C*, Copper; *D*, Diamond; *G*, Gold; *I*, Iron *L*, Lead; *M*, Mundic; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver *R*, Ruby; *S*, Silver; *S-l*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. * in the "called-up" column of British Mines, signifies that the mine is conducted on "Cost Book" principles: † in the "Head Office" column of African Mines, signifies that the address given is not that of the head office but of a sub- or transfer office and ‡, following the names of African mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct; we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

BRITISH MINES.

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
			£ s.		£ s. d.			
Atlas .....*T*	—	—	1 0	—	1 0 0	12,000	Devon	Camborne.
Blue Hills .....*CT*	5/- 10/-	7/6	*	2/- May, '81	5 12 6	5,353	Cornwall	Camborne.
Botallack .....*T*	1 1⅛	1⅛	*	—	51 4 6	1,880	Cornwall	St. Just.
Carn Brea .....*T*	8 8⅛	8⅛	*	2/6 Dec., '93	21 18 5	6,000	Cornwall	Carn Brea.
Cook's Kitchen ..*T*	15/- 20/-	15/-	*	—	35 15 10	4,900	Cornwall	Camborne.
Cumberland .....*L*	—	—	1 0	5% May, '88	1 0 0	51,988	Cumberland...	7, Angel-court E.C.
Derwentwatr.*CLZ*	—	—	1 0	—	1 0 0	10,150	Cumberland..	Manchester.
Devon Gt Cons.*CA*	22/6 27/6	27/6	5 0	3/- May, '94	2 0 0	10,240	Devon	8, Finsbury-circus.
Dolcoath .....*T*	69 70	69	*	12/6 Apr. '94	9 12 6	4,700	Cornwall	Camborne.
Drakewalls *CTM*	-/3 -/6	-/6	0 5	—	0 2 0	61 856	Cornwall	Dashwood House.
EastGrassingtonL	—	—	1 0	—	1 0 0	20,965	Yorkshire	5, Copthall-buildings
East Pool .....*AT*	8⅛ 9	8⅛	*	1/6 June, '94	0 9 9	6,400	Cornwall	Illegan.
Gawton .....*CA*	—	—	2 10	—	2 7 3	12,000	Devon	20, Great St. Helens.
Great Laxey.....*L*	1 2	2	4 0	5/- Apr., '92	4 0 0	15,000	Isle of Man ...	Douglas, Isl of Man.
Green Hurth ...*L*	1/3 1/9	1/9	1 0	-/6 June '89	0 19 0	32,000	Cumberland...	Newcastle.
Halkyn .....*L*	—	—	1 0	2/- June, '94	1 0 0	10,000	Flintshire.....	Chester.
Hexworthy .....*T*	—	—	1 0	—	1 0 0	14,634	Devon	6, Queen-street-place
Isle of Man .....*L*	—	—	5 0	5/6 Sep. '93	5 0 0	14,000	Isle of Man ...	Chester.
Killifreth .....*T*	2¾ 3¼	2¼	*	2/- July,'94	5 11 6	6,000	Cornwall	Truro.
Lead Hills .....*L*	15/- 20/-	17/6	6 0	3/- Sep. '93	6 0 0	20,000	Lanarkshire ..	30, Finsbury-circus.
Levant .....*CT*	—	—	*	2/6 July, '94	11 9 6	2,560	Cornwall	Penzance.
Lovell .....*T*	—	—	*	1/3 Nov., '91	1 16 7	7,165	Wendron	3, Gt. Queen-st., S.W.
Miners.....*L*	—	—	5 0	5/6 Mar. '90	5 0 0	9,000	Denbighshire.	Minera, N. Wales.
Nenthd&Tndle.*LZ*	-/6 1/-	1/-	1 0	6% Feb., '91	0 18 0	48,875	Northumberld	Newcastle-on-Tyne
New Balleswidd'n*T*	—	—	1 0	—	1 0 0	25,000	Cornwall	St. Clement's Ho., E.C
NewCooksKitn.*TC*	—	—	*	—	10 18 3	4,900	Cornwall	Camborne.
New Minera	—	—	1 0	1/- Oct., '92	1 0 0	30,000	North Wales..	6 Queen-street-place,
Pedn-an-dras .....*T*	—	—	*	—	4 3 6	7,000	Cornwall	Redruth.
Phœnix United*TC*	1/- 3/-	3/-	*	1/- Mar. '90	7 4 6	10,666	Cornwall	Liskeard.
Polberro .....*T*	25/- 30/-	25/-	*	—	3 7 9	18,000	Cornwall	37, Walbrook.
So. Condurrow *TC*	10/- 15/-	15/-	*	3/6 Apr. '93	18 0 0	6,123	Cornwall	20, Great St. Helens
South Crofty *TA*	1⅝ 1½	1⅝	*	—	17 7 6	8,120	Cornwall	Pool, Cornwall.
S. Frances Untd. *T*	15/- 20/-	15/-	*	—	2 7 6	6,000	Cornwall	Redruth.
Tincroft .....*T*	12 12½	12	*	2/- Aug. '94	15 7 6	6,000	Cornwall	Carn Brea.
Weardale .....*L*	7/-	7/-	4 0	1/3 Oct. '90	1 10 0	50,000	Durham.....	3, Lombard-court.
West Frances ...*T*	1½ 2	30/-	—	2/6 May,'89	16 0 7	6,144	Cornwall	Camborne.
West Kitty .....*T*	6 8½	8½	*	3/- Aug. '94	1 2 0	6,000	Cornwall	37, Walbrook.
Wheal Agar ..*TA*	2 2¼	1¾	*	2/6 Aug. '88	23 5 2	6,000	Cornwall	Redruth.
Wheal Basset ..*TC*	1⅛ 1¾	30/-	*	10/- Apr.'88	12 9 6	6,144	Cornwall	Redruth.
Wheal Friendly..*T*	-/6 1/-	1/-	*	—	0 12 9	10,000	Cornwall	110, Cannon-st., E.C.
Wheal Grenville *T*	18½ 19½	18½	*	5/- Aug. '94	18 8 0	6,000	Cornwall	7, Union-court, E.C.
Wheal Kitty.....*T*	10/- 15/-	12/-	*	3/- Mar. '88	4 5 6	8,590	Cornwall	Truro.
Wheal Metal &F.*T*	¾ ¾	¼	*	—	0 13 9	10,784	Cornwall	14, Broad-street Av.

AUSTRALIAN AND NEW ZEALAND MINES.

Achilles Gld Fld.	2/6 3/6	3/6	1 0	—	1 0 0	80,307	New Zealand	3, Church Pas., E.C.
Aladdins Lamp *G*	12/6 15/-	17/6	1 0	1/- Apr. '54	1 0 0	100,000	N S Wales ...	4-6, Throg. Avenue.
Amana (Went.) *G*	—	—	1 0	—	1 0 0	75,000	N. S. Wales ..	5, Throg. Avenue.
Amana (Went.) *G*	—	—	1 0	—	0 12 6	25,000	N. S. Wales ...	5, Throg. Avenue.
Anglo-Saxon ...*G*	—	—	1 0	2/- July, '89	1 0 0	51,000	Queensland ..	4, Lombard-court.
Australasian .....*G*	1/3 1/9	1/9	1 0	-/6 Mar., '92	1 0 0	210,000	Queensland ..	6, Queen-st. place
Australian .....*C*	—	—	20 0	1/6 July '94	7 7 6	18,315	So. Australia	18, Old Jewry Chbrs,
Aus. Bro. Hill Con.	2/3 2/9	2/9	1 0	1/- June, '91	1 0 0	537,138	N. S. Wales ...	Winchester House.
Baker's Creek ...*G*	1⅜ 1⅜	1⅜	1 0	1/- July '94	0 17 6	100,000	N. S. Wales ...	Hillgrove, N.S.Wales
Bayley's Reward *G*	16/- 18/-	17/-	1 0	-/4 Aug. '94	1 0 0	480,000	W. Australia...	2, Met. Ex. Buildings
Blue Spur & G. G.	-/6 1/-	1/-	1 0	—	1 0 0	80,098	New Zealand	6, Gt. St. Helens'
Bonnie Dundee *G*	2/9 3/3	3/3	1 0	—	0 18 0	120,000	Queensland ..	3-5, Gracechurch-st
Do. Pref.	—	—	1 0	2/- May, '94	1 0 0	7,268	Queensland ..	3-5, Gracechurch st.
Brilliant.....*G*	10/6 11/6	11/6	2 0	-/3 Aug. '94	2 0 0	250,000	Queensland ..	Charters Towers.
Brilliant Block...*G*	1¾ 1⅜	27/6	2 0	-/9 Aug. '94	2 0 0	250,000	Queensland ..	3, Gracechurch-st.
Brilliant, St. Geo.	14/- 16/-	15/-	0 10	3d. Aug. '94	0 6 3	72,000	Queensland ..	Charters Towers.
Brit. Brok. Hill *S*	4/- 5/-	4/3	5 0	—	5 0 0	240,000	N. S. Wales ...	Dashwood Ho., E.C.
Broken Hill Prop.	2⅛/16 3⅛/16	56/- xd	9 8	1/- Aug. '94	0 8 0	960,000	N. S. Wales ...	Dashwood Ho., E.C.
Brkn. Hill P. Bl.10	—	—	10 0	1/- Feb. 94	9 13 0	100,000	N. S. Wales ...	117, Leadenhall st. EC
Brkn. Hill P. Bl.14	—	—	5 0	—	5 0 0	10 ,000	N. S. Wales ...	117, Leadenhall st. EC
Carrington.....*G*	-/9 1/3	1/3	12/6	—	0 12 6	100,007	Queensland ...	9, Tokenhouse Yard.
Craven's Cal. ... *G*	4/6 5/-	5/-	0 6	-/3 June '94	0 4 8	100,000	Queensland ..	30-1, S. Swithin's-le.
Croydon King B. *G*	—	—	0 5	—	0 5 0	60,000	N. Queensland	Leadenhall Big. E.C.
Cumbrind (New)*G*	-/6 1/-	1/-	1 0	2/6 Dec. '87	1 0 0	184,690	Queensland ...	Blomfield House E.C
DayDawn B.&W.*G*	6/- 7/-	7/6	1 0	-/6 Mar. 93	1 0 0	498,400	Queensland ...	3-5, Gracechurch-st.
Day Dawn P. C. *G*	3/6 4/-	3/6	1 0	-/6 Apr. '92	1 0 0	490,000	Queensland ...	Winchester Ho., E.C
Eaglehawk.....*G*	1/- 1/6	1/6	1 0	—	0 19 3	120,000	Victoria.....	31, Lombard-street.
Eng. & Aus.Con.*Cs*	1/16	1/16	2 0	2% 1883	1 17 6	70,000	So. Australia	136, Palmerston-bldg
Eng. & Aus 6% Deb.	—	—	50 0	6% July, '94	50 0 0	700	So. Australia	136, Palmerston-bldg
Etheridge .....*G*	—	—	0 5	—	0 5 0	324,290	Queensland ..	6-7, Queen-street-pl.
Frederick the Gt *G*	—	—	1 0	—	1 0 0	125,000	Victoria.....	St. George's House.
Glenrock .....*G*	1/3 1/9	2/6	1 0	—	0 19 6	225,000	N. Zealand ..	3-5, Queen-st. E.C.
Golden Gate.....*G*	1/3 1/9	1/9	0 10	—	0 10 0	150,000	Queensland..	9, Tokenhouse Yard.
Harrietville .....*G*	—	—	1 0	-/6 July, '90	1 0 0	146,330	Victoria.....	6-7, Queen-street-pl.
Kaboonga .....*G*	1/3 1/9	1/6	0 10	—	0 10 0	500,000	Queensland ..	70-71, Bishopsgate st.
Kangarilla .....*S*	2/6 3/-	2/3	1 0	—	1 0 0	88,275	So. Australia	68, Coleman-street,
Kapanga.....*G*	2/9 3/3	3/6	1 0	-/6 Jan. '91	0 19 6	250,000	N. Zealand ..	9, New Broad-street.
Kilkivan.....*G*	1/6 2/-	2/-	1 0	—	1 0 0	81,392	Queensland ..	4, Coleman-street.
Midas G. F. .....*G*	—	—	1 0	—	1 0 0	180,000	Victoria.....	32, Poultry, E.C.
Mills' Day Dawn*G*	1⅝/16 1⅝/16	1⅜ xd	1 0	-/6 July '94	0 15 9	300,000	Queensland ..	3, Gracechurch-st.
Moruya .....*GS*	—	—	1 0	—	1 0 0	59,235	N. S. Wales ...	16, St. Helen's-place.
Mosman .....*G*	1/- 1/8	1/9	1 0	-/3 Jan., '94	1 0 0	185,000	Queensland ..	3-5, Gracechurch-st.
Mt. Leyshon .....*G*	-/6 1/-	1/-	1 0	-/6 Dec. '90	1 0 0	157,989	Queensland ..	7, Draper's-gardens.
Mountain Maid *G*	2/- 3/-	2/-	0 10	—	0 5 3	58,000	Queensland..	Leadenhall Bldgs.
Mount Morgan *G*	2⅜ 2⅛ xd	2⅜ xd	1 0	-/6 July '94	0 17 6	1,000,000	Queensland ...	50, Lime-street.
Mt. Shamrock *GB*	—	—	1 0	—	1 0 0	275,000	Queensland ..	9, Tokenhouse-yard.
Mount Zeehan *Sl.*	-/6 1/-	1/-	1 0	—	1 0 0	193,257	Tasmania	Mansion Ho. Cham.
N. Smithfield ...*G*	—	—	0 10	3/- July, '94	0 10 0	48,000	Gympie.....	Queensland.
New Queen .....*G*	6/- 6/6	6/6	1 0	-/6 Apr., '94	0 19 6	158,915	Queensland ...	30, St. Swithin's-la.
No. 7 E. E. Queen	-/6 1/-	1/-	2 10	-/3 Sept, '92	0 8 9	96,000	Queensland ...	37, St. Swithin's-la.
PhœnixGold.PileC	—	—	0 5	-/9 Aug. '94	0 b 0	48,000	Gympie.....	Gympie, Queensland
Port Phillip .....*G*	—	—	0 5	—	0 5 0	200,000	Victoria	57, Moorgate-st., E.C.
Queen's Bthdy Un	—	—	1 0	—	0 10 0	75,000	Victoria	7-8, Gt. Wnchester St.
Queens. Smelting	⅛ ⅛	⅛	—	—	1 0 0	36,244	Queensland ..	9, Tokenhouse Yard.
ScottishAustralian	¾ 1	1	1 0	4 4-5d. May,'94	1 0 0	200,00	N.S. Wales ..	Winchester Ho. E.C.
Sunburst.....*G*	—	—	0 10	-/6 Mar. '92	0 10 0	150,000	Queensland ..	9, Tokenhouse Yard.
Tasmanian Crown	—	—	1 0	—	1 0 0	125,990	Tasmania	8, Old Jewry, E.C.
Tipperary .....*G*	—	—	1 0	—	1 0 0	35,000	N. Zealand ..	3-5, Queen-st., E.C.
True Blue .....*G*	—	—	1 0	-/3 July, '94	1 0 0	53,000	Australia	Leadenhall Bldg. E.C.
Victoria Associatn.	—	—	1 0	-/3 Aug. '94	1 0 0	144,000	Char. Towers	8, Crosby-square.
Victory..... *G*	4/- 6/-	6/-	0 5	-/6 Mar., '94	0 5 0	200,000	Queensland ...	32, Gresham-st., E.C
Walhi.....*G*	1⅛/16 1⅛/16	1⅜	1 0	1/- June '94	1 0 0	150,000	New Zealand	11, Abchurch-la. E.C
Wentworth Ord.*G*	3/- 4/-	4/8	1 0	—	1 0 0	350,000	N. S. Wales ...	4-6, Throgmort. Av.
West. Priority...*G*	7/- 9/-	7/16	1 0	6/- Jan. '93	1 0 0	150,000	N. S. Wales ..	4-6, Throgmort. Av.
W. Argentine ...*G*	-/9 1/-	1/-	1 0	—	0 19 0	150,000	N. Zealand ...	3-5, Queen-street.
W.Australian G.F.	1⅜ 1⅛	1⅛	1 0	—	1 0 0	} 65,000	W. Australia...	28-29, S. Swithin's-la.
W.Australian G.F.	11/3 15/3	8/-	1 0	—	0 4 0		W. Australia...	28-29, S. Swithin's-la.
Zeehan Montana *S*	—	—	1 0	8d Aug., 94	1 0 0	68,000	Tasmania	11, Queen Victoria st
Zeehan Montana *S*	—	—	1 0	5d Aug., 94	0 12 6	12,600	Tasmania	11, Queen Victoria st

EUROPEAN MINES.

Alamillos .....*L*	⅜ ⅝	⅝	2 0	-/3 Sept. '92	2 0 0	25,000	Spain	6, Queen-street-place
Avala .....*Q*	0 ⅛	⅛	1 0	1/- May '93	1 0 0	150,047	Servia.....	4, Tokenho. Bldgs.
Consetti Ore .....*I*	5 5⅛ xd	5⅛ xd	1 0	5/- July '94	1 0 0	55,200	Spain	19, Grey-st., N'castle.
English Cr. Spelter	⅜ ⅝ xd	⅝	1 0	2½% Aug. '94	1 0 0	84,000	Lombardy	9, Queen-street-place
Fortuna .....*L*	12/6 17/6	15/-	2 0	-/6 Sept. '92	2 0 0	25,000	Spain	6, Queen-street-place
Libiola.....*C*	3⅜ 3⅝	3⅜	5 0	5/- Mar. '94	5 0 0	60,400	Italy	Dashwood Ho., E.C.
Linares .....*L*	3⅜ 3⅝	3	3 0	4/- May,'94	3 0 0	14,998	Spain	6, Queen-street-place
Marbella .....*I*	2⅝ 3	55/-	10 0	8/- Mar. '93	10 0 0	25,000	Spain	78, Queen Victoria-st.
Mason & Barry...*C*	2⅜ 2⅝	2⅜	5 0	2/- May. '94	5 0 0	185,172	Portugal	87, Cannon-street.
Oscar.....*G*	—	—	5 0	—	0 4 8	117,240	Norway	6A, Austin Friars.
Pestarena .....*L*	2/6 2/-	3/-	20 0	—	3 0 0	67,899	Italy	6-7, Queen-street-pl.
Pontgibaud.....*L*	—	—	20 0	11/5Dec.'93	20 0 0	14,000	France	6-7, Queen-street-pl.
Rio Tinto .....*C*	14½ 14⅝	14⅞	10 0	7/- May,'94	10 0 0	325.000	Spain	30, St. Swithin's-lane
Do. (Mort. Bonds)	103 105	105	100 0	5% July, '94	100 0 0	£1892,740	Spain	30, St. Swithin's-lane
Do. (2nd do.)	101 103	103	100 0	5% July, '94	100 0 0	£1024,860	Spain	30, St. Swithin's-lane
Do. (3rd do.)	99 101	101	100 0	5 p.c. July, 94	100 0 0	£867,080	Spain	30, St. Swithin's-lane
Sipanji .....*AQ*	10/- 12/-	7/-	1 0	—	0 19 0	95,000	Servia.....	120, Bishopsgt-st. Wn.
Tharsis.....*C Sul*	4⅜ 4⅝	4⅝	2 0	12½% Mar. '94	2 0 0	625,000	Spain	Glasgow.
West Prus Pre.pref	—	—	10 0	5% June '94	10 0 0	365	Germany	Walbrook Ho., E.C.
West Prussian Pre.	—	—	10 0	5% June, '94	10 0 0	5,450	Germany	Walbrook Ho., E.C.
West Prussian Or.	—	—	10 0	5% June, '94	10 0 0	14,050	Germany	Walbrook Ho., E.C.
Wohlfahrt .....*L*	—	—	1 0	2% June, '94	1 0 0	99,834	Prussia	17, Victoria-st., S.W.
Wohlfahrt .....*L*	—	—	1 0	3% June, '94	0 10 0	9,099	Prussia	17, Victoria-st., S.W.

INDIAN AND ASIATIC MINES.

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Asia Minor Pref. *St.*	—	—	0 10	—	0 10 0	42,430	Asia Minor ...	2, Metal Ex. Bldgs.
Do. Ord. ...	—	—	0 10	—	0 9 0	51,584	Asia Minor ...	2, Metal Ex. Bldgs.
Balaghat Mysore*G*	7/- 8/-	8/6	1 0	—	0 17 0	160,000	India	6-7, Queen-street-pl.
Burma Ruby.....*R*	3/6 4/6	4/6	1 0	—	0 17 0	300,000	Burmah	Suffolk House, E.C.
ChampionReef...*G*	3⅝ 3¾	3¾	1 0	2/- Aug. '94	1 0 0	200,000	India	6-7, Queen-street-pl.
Colar Central ...*G*	-/3 -/5	-/6	1 0	—	1 0 0	200,000	India	Dashwood Ho., E.C.
Ceromandel..... *G*	1/- 2/-	2/-	1 0	—	0 12 6	95,000	India	6-7, Queen-st.-place.
Devâla Mayar ...*G*	—	—	1 0	—	1 0 0	200,000	India	34, Nicholas-lane.
Gemming&Mining	—	—	2 6	—	1 7 6	19,594	Ceylon	183, Gresham House.
GoldFldsMysore*G*	22/-24/-	23/6	1 0	1/- July '92	1 0 0	220,000	India	6-7, Queen-street pl.
Gold Flds Siam *G*	—	—	1 0	—	1 0 0	150,000	Siam	19, St. Swithin's-lane.
Hyderabad Dec....	—	—	10 0	—	10 0 0	115,000	Deccan	16, St. Helen's-place.
Kempinkote GdFd	3/9 4/3	4/-	0 5	—	0 3 6	685,473	India	6-7, Queen-st.-place.
Mysore .....*G*	2⅛/16 2⅜/16	2⅛	1 0	2/- July, '94	1 0 0	250,000	India	6-7, Queen-street pl.
My. Harmhalli ...*G*	1/9 2/3	2/-	1 0	—	0 12 0	100,000	India	2, East India Avenue
Mysore Reefs ...*G*	11/- 12/-	12/6	1 0	—	0 19 6	134,788	India	6-7, Queen-street-pl.
Mysore West(N)*G*	9/- 10/-	8/6	1 0	—	0 18 0	127,408	India	Dashwood Ho., E.C.
Mysore Wynaad *G*	7/- 8/-	7/3	1 0	—	0 12 0	250,000	India	Dashwood Ho., E.C.
Nerbudda Coal &Im	⅛ ¼	¼	3 0	—	2 11 0	49,639	India	213, Gresham House
Nine Reefs .....*G*	4/6 5/-	2/3	0 10	—	0 10 0	50,000	India	6-7, Queen-street-pl.
Nine Reefs	4/- 4/6	—	0 10	—	0 9 6	200,000	India	6-7, Queen-street-pl.
Nundydroog.....*G*	1¾ 1¾	1¾	1 0	1/- Mar. '94	1 0 0	200,000	India	6-7, Queen-street-pl.
Ooregum (Df.O.)*G*	3⅛ 3¼	3 15/16	1 0	4/6 July, '94	1 0 0	145,000	India	6-7, Queen-street-pl.
Do. (10% Pref.).	3⅝ 3⅞	3⅝	1 0	4/- July, '94	1 0 0	95,536	India	6-7, Queen-street-pl.
Do. (10% Pref.).	3 3¼	3	1 0	4/- July '94	0 5 0	24,464	India	6-7, Queen-street-pl.
Pahang Corpn. *T*	7/- 8/-	8/-	1 0	15% Apr. '29	1 0 0	203,070	Malay Penin.	Blomfield Ho., E.C.
Pahang Kabang *T*	1/16 3/16	3/16	1 0	—	1 0 0	394,760	Malay Penin.	4a, Jeffrey's sq., E.C
South E. Mysore..	4/6 5/-	5/3	0 4	—	0 3 9	134,623	India	6-7, Queen-street-pl.

NORTH AMERICAN MINES.

Alaska Mexican...*G*	—	—	$5	—	$5	160,000	Alaska.....	30, St. Swithin's-ln.
Alaska Treadwell*G*	37/16 39/16	3⅜	$25	1/6 July, '94	$25	200,000	Alaska.....	30, St. Swithin's-ln.
Almada and T... *S*	-/3 -/9	-/9	2/6	—	0 2 6	351,008	Mexico	6, Queen-street-place
American Belle...*S*	2/3 2/9	2/6	1 0	-/6 Mar. '91	1 0 0	398,890	Colorado	25a, Old Broad-street
Anglo Mexican ...*S*	—	—	5 0	3/- Jan. '90	5 0 0	74,850	Mexico	23, College Hill.
Arizona (Pref.) Cu	9/6 9/9	—	4 0	—	4 0 0	158,920	Arizona	74, Geo.-st., Edinbor'
Do. 10% Deben.	50	—	100 0	7% May '94	100 0 0	2,660	Arizona	74, Geo.-st., Edinbor'
Big Creek ..... *Ay.*	—	—	1 0	1/- Dec. '91	1 0 0	50,000	Nevada	2, Pancras-lane, E.C.
California ..... *G*	—	—	0 10	-/6 May 90	0 8 9	129,571	Colorado	8t, George's Ho. E.C.
Canadian Phos. *P*	—	—	1 0	-/6 Nov.,'90	1 0 0	73,334	Canada	155, Fenchurch-st.
Colorado Boy.....*S*	—	—	1 0	—	1 9 0	112,491	Colorado	Abchurch-chbrs, E.C
Cortez .....*S*	—	—	1 0	3% Feb. '93	1 0 0	300,000	Nevada	Suffolk House, E.C.
Decatur.....*St.*	—	—	1 0	—	1 8 0	32,500	Colorado	35, Queen Victoria-st.
Do..... (Pref.)	—	—	1 0	—	1 0 0	12,500	Colorado	35, Queen Victoria-st.
De Lamar.....*GS*	18/- 19/-xd	18/6	1 0	1/- June '94	1 0 0	400,000	Idaho	6, Draper's-gardens.
Dickens Custer*GS*	—	—	1 0	—	0 19 9	420,000	Idaho	Winchester Ho. E.C.
Elkhorn .....*S*	13/- 14/-	13/6	1 0	-/9 July, '94	1 0 0	175,007	Montana	6, Draper's-gardens.
Emma .....*S*	-/2 -/4	-/4	0 5	—	0 5 0	403,618	Utah	15, Geo-st, Mansn. Ho
Flagstaff .....*S*	—	—	1 0	—	0 18 3	240,000	Utah	Dashwood Ho., E.C.
Fisk.....*G*	—	—	1 0	6d May, 94	1 0 0	134,000	Colorado	5, Fenchurch st.
Garfield .....*GS*	—	—	1 0	-/6 Dec. '88	0 19 6	98,185	Nevada	Suffolk House, E.C.
Gen. Mining Assoc.	7 7⅛	7¼	8 0	15/- Apr. '94	8 0 0	27,469	Nova Scotia...	Blomfield Ho., E.C.
Golden Feather *G*	7/- 8/-	8/-	1 0	—	1 0 0	180,000	California ...	8, Stephens Cs E.C.
Golden Gate .....*G*	4/- 5/-	5/-	1 0	—	0 19 6	79,600	California ...	8t. Stephens Cs E.C.
Golden Leaf..... *G*	1/8 2/-	1/8	1 0	—	1 0 0	300,259	Montana	8, Draper's Gardens.
Golden Valley...*G*	—	—	1 0	—	1 0 0	55,507	Colorado	15, Angel Court.
Harquahala.... *G*	6/- 7/-	7/6 xd	1 0	-/9 June '94	1 0 0	300,000	Arizona	6, Draper's Gardens.
Ho'comb Valley *G*	-/4⅛ -/7⅛	-/7⅛	0 5	—	0 5 0	540,000	California ...	14, Cornhill, E.C.
Idaho.....*GS*	1/3 1/6	1/6	1 0	—	0 4 8	143,439	Idaho	140, Leadenhall-st.
Jackson Goldfields	—	—	5 0	—	5 0 0	408,635	California ...	11, Poultry, E.C.
Jay Hawk .....*G*	5/6 6/6	6/6	1 0	-/6 Dec. '92	1 0 0	285,000	Montana	Dashwood House,
Kohinoor "B"*GS*	—	—	1 0	-/6 June,'81	1 0 0	112,921	Colorado	Blomfield Ho., E.C.
La Plata.....*S*	-/4⅛ -/7⅛	-/7⅛	0 5	1/3 Oct. '92	0 4 3	405,000	Colorado	11, Poultry, E.C.
Maid of Erin ...*S*	—	—	1 0	4c. pshMar.'94	1 0 0	575,000	Colorado	43, Threadneedle-st.
Mammoth Gold ...	-/3 -/6	-/6	1 0	—	1 0 0	400,000	Final Arizona.	257, Winchester Ho.
Mesq. d'l Oro (P) *G*	—	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Mesq. d'l Oro (D) *G*	—	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Montana .....*GS*	13/6 14/6	13/6	1 0	6% April '91	0 19 0	857,158	Montana	Gresham House, E.C.
New Colorado ...*S*	—	—	1 0	—	0 17 0	65,000	Colorado	Abchurch Cham. E.C
N.Consolidated*SC*	—	—	0 5	—	0 3 6	248,576	Nevada	15, Angel-court, E.C
N. Gold Hill.....*G*	-/2 -/4	-/4	1 0	—	0 19 9	191,045	N. Carolina ...	16, George-st., E.C.
New Guston .....*S*	13/9 16/3	13/16	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25a, Old Broad-st.
New Hoover Hill*G*	—	—	0 10	-/9 Dec. '85	0 10 0	120,000	N. Carolina ...	Langthorne Ho., E.C
New London .....*G*	—	—	2/6	—	0 2 6	327,816	New Carolina	55, Bishopsgt.-st. Wn
New Vancour. *Coal*	3/8 3/4	3/4	1 0	3% May, '94	1 0 0	215.000	Brit. Columbia	12, Old Jewry Chm.

"THE MINING JOURNAL" SHARE LIST—(Continued).

SOUTH AND CENTRAL AMERICAN MINES—(Continued).

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Santa Barbara ...C	—	—	0 10	1/3 Dec. '86	0 10 0	60,000	Brazil	Liverpool
Santa Elena .....N	1⅛ 1⅜	1¼	5 0	5/- Nov. '93	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
Santa Rita .....N	3½ 4	4	5 0	15s Apr., '94	5 0 0	20,000	Chili	DashwoodHouse,E.C
San Sebastian ...N	2⅛ 2⅜	2⅛	5 0	1/8 May '94	5 0 0	29,000	Chili	DashwoodHouse,E.C
Segovia .....G	— —	—	5 0	—	0 4 0	160,000	Colombia	5, Copthall-buildings
Sucre Pref.....G	— —	—	1 0	10s July '94	0 15 0	840	Colombia	23, St. Swithin's ln.
Sucre Ord. .....G	— —	—	1 0	8s July '94	1 0 0	10,000	Colombia	23, St. Swithin's ln.
Tetuan .....G	— —	—	1 0	—	0 19 6	200,000	Colombia	5, Copthall-buildings
Tolima "A" .....S	8½ 9	8¾	5 0	10s Aug. '94	5 0 0	14,000	Colombia	18, Finsbury-circus.
Do. "B" .....S	7¼ 7¾	7½ xd	5 0	10s Aug. '94	5 0 0	6,000	Colombia	18, Finsbury-circus.
Vic. & Altam.ra ...	— —	—	0 5	—	0 5 0	200,000	Venezuela ...	Broad-st. Avenue.
West Indian.....G	— —	—	0 5	—	0 5 0	700,000	San Domingo	49, Queen Victoria-st.
Zaruma .....G	— —	—	0 5	—	0 5 0	261,422	Ecuador.....	1, Gt. Winchester-st.

AFRICAN MINES.

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Africander..... G	1⅛ 1⅜	22/6	1 0	—	1 0 0	40,000	Transvaal	19, St. Swithin's-lane
Agnes Block..... G	9/- 11/-	12/6	1 0	—	1 0 0	78,507	Transvaal	54, Old Broad-street.
Appantoo..... G	— —	—	1 0	—	1 0 0	71,000	West Coast ...	9, New Broad-street.
Aurora.....G	4/- 6/-	5/16	1 0	5% Mar., '93	1 0 0	65,000	Witwatersrd.	8, Old Jewry.†
Aurora West, New G	5/- 7/-	7/-	1 0	5% Mar., '93	—	60,000	Witwatersrd.	1, Crosby Square.‡
Balkis Eersteling G	-/9 1/3	-/8	0 10	—	0 9 8	520,000	Transvaal	85, Gracechurch-st.
Balkis Land	1/6 2/-	2/-	0 10	—	0 10 0	520,000	Transvaal	85, Gracechurch-st.
Banket.....G	-/9 1/3	1/3	1 0	—	1 0 0	200,000	Witwatersrd.	Johannesburg.
Bantjes Reef .....G	14/- 15/-	15/6	1 0	—	1 0 0	83,000	Witwatersrd.	Warnford-court.†‡
Barrett.....G	2/6 3/-	3/6	0 10	—	0 9 0	207,496	De Kaap	17, Basinghall-street
Bechuanaland Exp.	25/6 26/6	26/9	1 0	—	1 0 0	200,000	Bechuanaland	19, St. Swithin's-lane
Block "B" Lang.	6/6 6/6	6/6	1 0	—	1 0 0	535,000	Witwatersrd.	8, Princes-st . E.C.†
Booysen Land . . G	6/- 8/-	7/16	1 0	—	0 11 0	95,000	Transvaal.....	8, Princes st., E.C.†
Do. Pref.....	— —	—	1 0	8% Mar., 94	0 10 0	71,174	Transvaal.....	4, Tokenhouse-bldgs.
Brit. S. A. Char. ...	34/- 35/-	34/9	1 0	—	1 0 0	2,000,000	S. Africa	19, St. Swithin's-lane
Buffelsdoorn..... G	27/- 29/-	28/6	1 0	—	1 0 0	250,000	Potchefstroom	8, Old Jewry.
Buluwayo Synd. ...	⅞ 1¼pm	1¼pm	1 0	—	1 0 0	12,000	Matabeleland	10, Helen's Place.
Cape Copper C	1⅝ 1¾	1¾ xd	2 0	1/3 June '94	2 0 0	300,000	Cape Colony...	9, Queen-street-place.
Do. 6 % Pref. ..	1⅞ 2	1⅞ xd	2 0	1/3 June '94	2 0 0	45,000	Cape Colony..	9 Queen-street-place.
Con. Montrose... G	1/- 2/-	2/-	1 0	—	0 18 6	69,000	Transvaal	15, George st. Mn. Ho.
Champ d'Or..... G	1⅞ 2	1⅞	1 0	—	1 0 0	116,016	Witwatersrd.	8, Old Jewry, E.C.
Champ d'Or Deep G	8/- 9/-	9/6	1 0	—	1 0 0	275,000	Witwatersrd.	Fox st., Johannesbrg
City and Suburb. G	14⅞ 15⅛	15⅜	1 0	25% Mar. '94	1 0 0	75,000	Witwatersrd.	1, Crosby Square.†
Coetzeestroom ...G	1/- 2/-	2/-	0 5	—	0 5 0	140,000	De Kaap	105, Leadenhall-street
Con. Buitfontein D	26/- 27/-	26/6	1 0	5% Nov. '89	1 0 0	721,500	Griqualand W	62, Lombard-st.
Con. Deep Levels G	1⅞ 2	1 15/16	1 0	4/- June '94.	1 0 0	137,250	Transvaal	30, St. Swithin's-lane.
Con. G. Fields S A.	2½ 2¾	2¾	1 0	10% Nov. '93	1 0 0	1,250,000	S. Africa	8, Old Jewry.
Do. 5½% Deben...	99¼ 100½	100⅝	5 0	5¼ July, '94	5 0 0	600,000	S. Africa	8, Old Jewry.
Crown Reef .....G	8½ 8¾	8⅝	1 0	25% May '94	1 0 0	120,000	Witwatersrd.	23, Austin Friars.†
De Beers Consol. D	15⅛ 15⅜	15	5 0	12/6 June '94	5 0 0	789,791	Transvaal	62, Lombard-street.
Do. 5½% 1st Deb..	101¼ 102⅛	102⅛	100 0	5¼% Feb. '94	5 0 0	£1,875000	Transvaal	62, Lombard-street.
Do. 5½% Bul. Ob.	102⅛ 103⅛	103⅛	100 0	5½% Apr. '94	5 0 0	£720,100	Transvaal	62, Lombard-street.
Durban Roodept. G	5 11/16 5 13/16	5 13/16	1 0	3/- June '94	1 0 0	£125,000	Witwatersrd.	28, Leadenhall-bldgs.
East Rand..... G	12/- 13/-	12/-	1 0	—	1 0 0	570,800	Witwatersrd.	170, Winchester-ho.†
Evelyn .....G	— —	—	1 0	10% Jan. '89	1 0 0	66,000	Witwatersrd.	28, Old Jewry, E.C.
Exploration	15/- 20/-pm	20/- pm	1 0	1/- Dec. '93	0 4 0	148,000	S. Africa	30, S. Swithin's-ln.
Exploring Co.	4⅛ 4½	4⅜	1 0	25/- Feb. '94	1 0 0	69,350	S. Africa	19, S. Swithin's-ln.
Ferreira .....G	8¼ 8¾	8¼	1 0	100% June '94	1 0 0	45,000	Witwatersrd.	29, Holborn Viaduct,†
Forbes Reef (Nw) G	3/- 5/-	5/-	1 0	—	0 19 0	105,000	De Kaap	45-8, Leadenhall-st.
Geldenhuis Deep G	3¾ 4	3 15/16	1 0	—	1 0 0	265,000	Transvaal	30, St. Swithin's-lane.
Geldenhuis Est. G	5¼ 5½	5⅝	1 0	20% Mar. '94	1 0 0	187,500	Witwatersrd.	29 & 30, Hol. Viaduct.
Do. Main Reef	9/- 10/-	9/-	1 0	—	1 0 0	150,000	Witwatersrd.	Warnford-court, E.C.†
George and May G	15/- 17/6	7/6	1 0	—	—	112,750	Witwatersrd.	Warnford Court, E.C.
George Goch ...G	— —	—	1 0	—	1 0 0	100,000	Witwatersrd.	Johannesburg.
Glencairn .....G	30/6 31/6	32/6	1 0	—	1 0 0	200,000	Witwatersrd.	2, Drapers-gardens.
Gold Estates T...G	3/6 4/6	4/6	1 0	15% Dec. '89	0 10 0	130,000	Transvaal	46, Queen Victoria-st
Gld. Fls. Deep...G	13/16 7/8	1 15/16	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G. F. of Mashonld.	10/- 12/6	13/6	1 0	—	1 0 0	200,000	Mashonaland	19, St. Swithin's-ln.
G.F.Tierra d' Fuego	2/1⅝ 2/4⅜	2/4⅜	0 4	—	0 4 0	400,000	Mosambique...	2, Tokenhouse Bldgs.
Grahamstown .. G	7/6 8/6	8/6	1 0	—	1 0 0	150,000	Witwatersrd.	14, Throgmorton-st.
Graskop .....G	-/9 1/3	1/3	0 5	2½% Mar. '92.	0 5 0	500,000	Lydenburg ...	85, Gracechurch-st.
Griqualand W....D	6¾ 7	6 11/16	10 0	4% March '94	10 0 0	105,700	Transvaal	62, Lombard-street
Henry Nourse ...G	3 1/16 3 3/16	3 3/16	1 0	—	1 0 0	100,000	De Kaap	Warnford-court.
Heriot (New) ...G	5⅛ 5⅜	5	1 0	—	1 0 0	195,000	Witwatersrd.	1, Crosby Square.†
Joe's Luck.....G	1/- 2/-	1/6	1 0	—	1 0 0	57,404	De Kaap	11, Queen Vic.-st.
Johannesburg Par	3⅜ 3⅝	3⅜	1 0	12½% Nov., '93	1 0 0	21,000	Witwatersrd.	Johannesburg.
Jubilee .....G	5⅛ 5⅜	5 1/16 xd	1 0	30% Aug. '94	1 0 0	30,000	Witwatersrd.	8, Old Jewry.†
Jumpers .....G	3⅞ 4⅛	4⅛ xd	1 0	30% June '94	1 0 0	100,000	Witwatersrd.	29, Holborn Viaduct.†‡
Kimberley .. ..D	5/16 5/16 pm	5/16pm	1 0	—	0 10 0	98,672	Kimberley ...	19, Finsbury circus.
Kimberley Edpt....	5/16 3/8	3/8	1 0	—	1 0 0	125,000	Kimberley ...	2, Drapers-gardens.
Kleinfontein (N) G	1 11/16 1 13/16	1 11/16	1 0	—	1 0 0	150,000	Witwatersrd.	8, Old Jewry.
Klerksdorp .....G	1/- 1/6	2/-	1 0	—	1 0 0	150,007	Transvaal	110, Cannon-street.
Koffyfontein.....D	15/- 17/6	17/6	1 0	—	0 5 0	50,000	Jacobsdaal ...	4, Bishopsgate street.
Langlaagte Est. G	4 4¼	4¼	3 0	12½% June '94	1 0 0	467,000	Witwatersrd.	69, Holborn Viaduct.†
Do. Royal	2¾ 2⅞	2¾	1 0	5% Sept. '93	1 0 0	100,000	Witwatersrd.	2, Drapers-gardens.‡
Lisbon-Berlyn ..G	2/- 2/6	2/3	2/6	—	0 2 6	283,233	Lydenburg ...	110, Cannon-street.
London & S. A. Ex.	— —	—	0 10	3/- June '94	0 10 0	100,000	S. Africa	19, Finsbury-circus.

AFRICAN MINES—(Continued).

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Luipaards Vlei Est.	6/6 7/6	9/-	1 0	6% Mar. '90	1 0 0	319,003	Witwatersrd.	Warnford-court.†
Do. do. do.	⅜ ¼	¼	1 0	—	0 10 0	25,000	Witwatersrd.	8, Old Jewry.
Main Reef (New) G	8/- 10/-	9/6	1 0	—	0 10 0	300,000	Witwatersrd.	8, Old Jewry.
May Consol. .....G	8/- 9/-	8/6	1 0	—	1 0 0	430,000	Witwatersrd.	4, Lothbury.†
May Deep Level G	9/- 10/-	9/6	1 0	—	1 0 0	146,000	Witwatersrd.	33, Cornhill, E.C.
Mashon. Agency...	1/16 5/16pm	5/16 pm	1 0	—	0 10 0	100,000	Mashonaland	8, Old Jewry, E.C.
Mashon. Central...	— —	—	1 0	—	1 0 0	200,000	Mashonaland	8, Old Jewry, E.C.
Matabeleland	— —	—	12/6	—	0 12 6	79,889	Matabeleland	73, Basinghall St, E.C.
Metropolitan (N) G	12/6 15/-	9/16	1 0	—	1 0 0	75,000	Witwatersrd.	1, Crosby Square.†
Meyer & Charl....G	5¼ 5¾	5⅛	1 0	25% June '94	1 0 0	71,887	Witwatersrd.	Warnford-court.†
Mines Trust	5/8 ¾	¾	1 0	3% May '94	1 0 0	82,774	So. Africa	130, Winchester Ho.
Modderfontein.. G	1 1¾	1⅝	1 0	—	1 0 0	200,000	Witwatersrd.	Warnford-court.†
Montrose..... G	— —	⅝	1 0	3/- Feb. '90	1 0 0	70,000	De Kaap	65, New Broad-street
Moodies G.&E....G	7/- 8/-	8/6	1 0	-/4 May '90	1 0 0	240,000	De Kaap	8, Old Jewry.†
Mozambique.....	11/3 13/9	15/-	1 0	—	1 0 0	400,000	S. E. Africa ...	Broad-street House.
Namaqua C	17/6 20/-	18/9	2 0	2/6 July '91	2 0 0	194,331	Namaqualand.	34, Leadenhall-bldg.
New Black Reef ...	5/6 6/6	—	1 0	—	1 0 0	76,000	Witwatersrd.	3, King William st.†
New Chimes..... G	1¾ 1⅞	1⅞ xd	1 0	10% June, '94	1 0 0	70,000	Witwatersrd.	8, Old Jewry, E.C.
New Clewer Estate	⅜ 1	1	1 0	—	1 0 0	100,000	Lydenburg ...	29-30, Holborn-viadt.
New Crœsus..... G	1 15/16 1 15/16	1⅜	1 0	5 % Aug. '92	1 0 0	195,000	Langlaagte ..	4, Bishopsgt.-st, Wt.
New Edwin Brav	— —	—	7 0	—	7 0 0	65,000	De Kaap	23, College Hill
New Gordon.....D	3/6 4/6	4/6	1 0	5% Dec. '89	1 0 0	560,250	Griqualand ...	110, Cannon-street.
New Jagersf. ...D	13¼ 13½	13 1/16	10 0	5% Mar., '94	10 0 0	100,000	Transvaal	5, Copthall-buildings
New Louis D'Or.. G	2/6 5/-	5/-	1 0	—	1 0 0	100,000	Witwatersrd.	53, New Broad-street
New Primrose ...G	4 4¾	4⅝	1 0	20% July '94	1 0 0	230,000	Witwatersrd.	2, Draper's-gardens.
New Rietfontein G	17/6 22/6	1-1/16	1 0	—	1 0 0	160,000	Witwatersrd.	Warnford-ct., E.C.
NewS.Augustine D	-/4½ -/7½	-/9	1 0	—	0 19 0	234,583	Griqualand W	30-1, St. Swithin's-ln
New Spes Bona ...	4/- 6/-	6/-	1 0	—	1 0 0	113,801	Witwatersrd.	24, N. John-st., L'pl.
N. Ophir Concess.	-/9 1/3	1/3	1 0	—	0 18 6	111,857	E. CoastAfrica	31, Lombard-street.
New Virginia ...G	3/9 4/3	2/9	0 10	—	0 10 0	48,335	Transvaal	26, Budge-row, E.C.
Nigel .....G	2 13/16 2 15/16	2⅝	1 0	15% June '94	1 0 0	160,000	Witwatersrd.	1, Crosby-square.
Nooitgedacht E. G	— —	—	1 0	—	1 0 0	160,000	Lydenburg ...	8, Old Jewry.
Oceana	2 2¼	2 1/16	1 0	25/- Nov. '89	1 0 0	150,000	Transvaal	4, Sun Court, E.C.
Oceana Developmnt	⅛ dis par	⅛dispar	1 0	—	0 5 0	50,000	Transvaal	4 Sun Court, E.C,
Orange F.S.E. ...D	3¼ 3¾	3¾	1 0	12½ Mar. '94	1 0 0	284,000	OrangeF.State	10, Moorgate-street.
Orion..... G	— —	—	1 0	10% June '94	1 0 0	30,000	Witwatersrd.	10, Basinghall-street
Otto's Kopje..... D	1/9 2/3	2/3	1 0	—	0 19 3	437,888	Kimberley ...	110, Cannon-st., E.C.
Paarl Central ... G	19/- 21/-	1 1/16	1 0	—	1 0 0	138,750	Transvaal	29-30, Hol. Via., E.C.
Paarl Ophir ..... G	— —	—	1 0	5p.c. Apr. '94	1 0 0	12,000	Tweefontein ...	Cape Town.
Pardy's Mozambq.	— —	—	0 10	10p.c. Apr. 94	0 10 0	13,000	S. E. Africa ...	Broad St. Avenue.
Piggs Peak, New G	1/6 2/6	1/9	1 0	—	0 16 6	230,326	Swaziland ...	6, Queen-street-place
Potchefstoom ... G	1/- 2/-	2/-	1 0	—	1 0 0	161,000	Potchefstroom	19, Bury-st., E.C.
Princess Estate G	18/8 21/3	1¼	1 0	—	1 0 0	72,046	Witwatersrd.	33, Cornhill, E.C.
Randfontein .....G	14/- 15/-	14/9	1 0	—	1 0 0	1,916,500	Witwatersrd.	59, Holborn Viaduct.†
Rand Mines ..... G	6⅛ 8⅜	8⅜	1 0	—	1 0 0	332,708	Witwatersrd.	29-30, Holborn Via.
Read's Drift .....D	8/6 9/6	9/6	1 0	—	—	50,000	Transvaal	19, Finsbury circus.
Robinson .....G	6 6¾ xd	6¾ xd	5 0	5% Aug. '94	5 0 0	543,750	Transvaal	58, Holborn Viaduct.†‡
Roodepoort Un. G	2⅞ 3	2 13/16	1 0	10p.c.Aug. '94	1 0 0	100,000	Witwatersrd.	Warnford-court.†
Salisbury New ...G	2 1/16 2 3/16	2 3/16	0 10	—	0 10 0	93,000	Witwatersrd.	1, Crosby-square.†
Sheba .....G	27/6 28/6	28/6	1 0	1/- July, '94	1 0 0	614,450	Lydenburg ...	85, Gracechurch-st.
Silati .....G	2/8 3/-	2/6	1 0	—	0 17 6	625,000	Zoutpansberg.	4, Sun Court, E.C.
Simmer & Jack...G	7¾ 7⅞	7 9/16	1 0	10% May '94	1 0 0	85,000	Witwatersrd.	33, Cornhill.
S.A. Gold Trust ...	25/- 27/6	27/6	1 0	10% April '93	1 0 0	220,000	South Africa..	8, Old Jewry.
S.Simmer & Jack G	1 1/16 1 3/16	1 1/16	1 0	—	1 0 0	120,000	Witwatersrd.	31, Lombard-st., E.C.
Spitzkop (New) G	9/6 10/6	5/3	1 0	—	0 19 6	99,070	Lydenburg ...	15, Bishopsgt-st, Wt.
Stanhope ..... G	1⅝ 2¼	2¼	1 0	50% July, '94	—	34,000	Witwatersrd.	1, Crosby Square.†
Sutherland R. ...G	4/3 4/9	4/9	1 0	—	0 18 6	220,000	Zoutpansberg.	3, Budge-row, E.C.
Teutonia.....G	— —	—	1 0	—	1 0 0	96,800	Witwatersrd.	8, Old Jewry.
Thistle Reef ..... G	-/3 -/6	-/6	0 5	—	0 4 0	180,000	Barberton	15, Angel-court, E.C.
Trans. Coal Trust...	11/6 12/6	12/3	1 0	2½% May '94	1 0 0	439,965	Witwatersrd.	Broad-st. House, E.C.
Trans. Est. & Dev.	8/6 9/6	9/-	1 0	—	1 0 0	285,700	Transvaal	76, Old Broad-st. E.C.
Trans. Gold .....G	2 1/16 2 1/16	2 1/16	1 0	1/- June '94	1 0 0	250,000	Transvaal	Suffolk House, E.C.
Trans. Land.....	5/3 5/9	6/-	1 0	—	1 0 0	79,915	Transvaal	Suffolk House, E.C.
Trans. Land.....	1/8 2/8	2/3	1 0	—	0 15 0	169,993	Transvaal	33, Cornhill.
Treasury..... G	— —	—	1 0	7½% May '94	1 0 0	26,000	Witwatersrd.	Johannesburg.
Turffontein Est. ..	— —	—	1 0	2½ Jan. '94	1 0 0	40,007	So. Africa	130, Winchester Ho.
Un. Ivy Reef.....G	13/9 16/3	16/3	1 0	2½ Jan. '94	1 0 0	45,000	Transvaal	110, Cannon-street
Un. Langlaagte G	10/- 12/6	12/6	1 0	—	1 0 0	100,000	Witwatersrd.	23, St. Swithin's-ln.
Van Ryn ..... G	1¼ 1⅜	1⅜	1 0	—	1 0 0	99,810	Witwatersrd.	1, Crosby-square.†
Victory Hill .....G	— —	—	1 0	—	1 0 0	108,000	De Kaap	Portland House, E.C.
Village Main Reef	3⅞ 4⅛	4⅛	1 0	—	1 0 0	135,000	Witwatersrd.	8, Old Jewry.
Wassau .....G	— —	—	1 0	—	1 0 0	100,000	Gold Coast ...	147, Cannon-street.
Wemmer .....G	4⅝ 4⅞	5 1/16	1 0	10% Nov. '91	1 0 0	55,000	Witwatersrd.	19, Bury-st., E.C.
Witwatersrandt ...	22/- 23/-	22/6	1 0	—	1 0 0	250,000	Witwatersrd.	Warnford-court.†
Wolhuter .....G	2⅛ 3	2⅞	1 0	—	1 0 0	120,000	Witwatersrd.	5, Copthall-buildings
Wolverand.....G	⅝ ⅝	⅝	1 0	2/- Apr., '94	1 0 0	16,750	Transvaal.....	5, Copthall-buildings
Wolverand.....G	— —	—	0 16 0	—	0 16 0	39,021	Transvaal	5, Copthall buildings
Worcester .....G	2¾ 2⅞	2 15/16	1 0	20% Aug. '94	1 0 0	90,727	Witwatersrd.	8, Old Jewry.†
Zambesia Explors.	2⅜ 2⅝	2⅝	1 0	—	1 0 0	45,000	Transvaal	13, George-st., E.C.

BRITISH COAL AND IRON COMPANIES.

Name.	Closing Price, Aug. 24, 1894	Closing Price, Aug. 17, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Albion Steam	...	...	10 0	10 p c Feb. 94	10 0 0	22,000	Pontypridd ...	6, Crosby-sq., E.C.
Andrew Knowles...	11¾ 12	11¾	50 0	14s Mar. 94	35 0 0	24,400	Pendlebury ...	Pendlebury, nr Man.
Do do	27 31	29	50 0	7/6 July 94	50 0 0	600	Pendlebury ...	Pendlebury, nr Man.
Do Mort. Debts.	101 103	102	100 0	5 p c July 94	100 0 0	£125,000	Pendlebury .	Pendlebury, nr Man.
Arniston.	...	25¾	10 0	25s May 94	8 0 0	6,500	Arniston	10, S. Andw-sq Edin.
Barrow Hem. Ord.	1¾ 2¼	2	7 10	...	7 10 0	150,000	Barrow-in-Fur	10, S. Swithin's-lane
Do 5 p. c. Pref. ..	4¾ 5¾	5	7 10	...	7 10 0	50,000	Barrow-in-Fur	10, S. Swithin's-lane
Bolckow Vaughan	11¾ 11¾	5¾	20 0	10s Mar. 94	20 0 0	81,488	York&Durhm.	16, Philpot-lane.
Do do	8¾ 8¾	10¾	20 0	6s Mar. 94	12 0 0	93,045	York&Durhm.	16, Philpot-lane.
Do 5 p. c. Pref.	20¾ 21¼	20⅞	20 0	5 p c Feb. 94	20 0 0	23,604	York&Durhm.	16, Philpot-lane.
Cairnlable	8 8¼	8¼	10 0	10 p c Dec. 93	10 0 0	5,738	Scotland	100, Welling-st., Glas
Calderbank Steel&c	2 2¾	2¾	10 0	2½ Oct. 91	10 0 0	15,000	Near Glasgow	63, Vincent-st., Glas
Do 6 p c Pref....	7¼ 7¾	7¾	10 0	6 p c Oct. 91	10 0 0	17,000	Near Glasgow	63, Vincent-st., Glas
Consett Iron.....	20½ 21¼ xd	20¾ xd	16 0	9s July, 94	7 10 0	100,000	Durham	Consett, Co. Durham
Do 8 p. c. Pref.	10 10¾ xd	14	5 0	4s July, 94	5 0 0	100,000	Durham	Consett, Co. Durham
Cowdenbeath	14 14½	...	10 0	15 p c Aug. 94	8 10 0	15,000	Fife.....	Cowdenbeath, Fife...
Do 5 p. c. Pref.	10¾ 10¾	10¾	10 0	5 p c Feb. 94	10 0 0	10,000	Fife.....	Cowdenbeath, Fife
D. Davis and Sons	... ...	...	10 0	10 p c Aug. 94	10 0 0	45,000	Rhondda	138, Leadenhall-st.
Ebbw Vale.....	8 8¼	7 31-32	23 0	10s June 94	20 0 0	69,754	South Wales...	122, Cannon-street
Do do	... 9¼	...	23 0	10s June 94	23 0 0	4,721	South Wales...	122, Cannon street
Fife Coal	29¾ 29¾	29¾	10 0	3 p c Aug. 94	9 0 0	12,000	Fife.....	Leven, Fifeshire.
Granville	... ...	...	30 0	...	30 0 0	1,400	Swadlincote...	Swadlincote,
Great Western (A)	... 8¾	8	5 0	6 p c Mar. 94	5 0 0	15,000	Pontypridd ...	35, W. Bute-st., Cardiff
Do do (B)	... 4¾	4	5 0	10 p c June 94	5 0 0	50,000	Pontypridd ...	35, W. Bute-st., Cardiff
Great Wyrley	... 120	120	100 0	...	100 0 0	600	Great Wyrley	Gt. Wyrley, Walsall
Hamstead	... 20	20	20 0	...	20 0 0	5,000	Great Barr ...	Gt. Barr, nr. Birm,
Henry Briggs (A)	... 12¾	12	8	12/9 Aug. 94	12 10 0	12,965	Normanton ...	Whitwood, Yorks.
Do do (B)	... 9¾	9	15	12/9 Aug. 94	8 10 0	11,405	Normanton ...	Whitwood, Yorks.
International	... ...	...	5 0	...	5 0 0	13,820	Glamorganshr	59, Mt. Strt.-sq., Cardiff
J. Brown & Co, ...	14 15	14¾	20 0	7/8 July 94	15 0 0	58,000	Yorkshire	12, Finchch-st., EC.
Do 5 p c Pref....	... 11	10	10 0	5 p c June, 94	10 0 0	18,000	Yorkshire	12, Finchch st., EC.
John Watson	12 12¾	12 1/2	10 0	12s May, 94	8 10 0	13,...	Lanark&Stirlg	123, Vincent-st., Glas
Do 6 p. c. Pref.	12¾	12¾	10 0	...	10 0 0	6,666	Lanark&Stirlg	123, Vincent-st., Glas
Lofthouse	... 8/8	8/8	4 0	...	3 0 0	18,658	Lofthouse	Lofthouse, Yorks
Lothian Pref.	7 7	7	10 0	2½ p c May 94	10 0 0	12,500	Scotland	Newbattle Col., Dalk.
Do Ordinary ...	... ...	...	10 0	...	10 0 0	22,100	Scotland	Newbattle Col., Dalk.
Main Colliery	... ...	...	10 0	5 p. c. July 94	10 0 0	10,000	Glamorgan ...	Balwin-st., Bristol
Merry Cunningh.	... 10¾	10¾	10 0	...	10 0 0	12,500	Lanark&Renw	127, Vincent-st., Glas
Do 7 p. c. Pref.	10¾ ...	...	10 0	7 p c May, 94	10 0 0	£150,000	Lanark&Renw	127, Vincent-st., Glas
Do 5 p. c. Debs.	105 ...	105	100 0	5 p c May, 94	10 0 0	11,548	Lanark&Renw	127, Vincent-st., Glas
W. Shariston Pref.	12¾ 13¼	12¾	20 0	10s July, 94	10 0 0	7,500	Yorkshire	110, Cannon-st., E.C
Newport Abercarn	6¾ 7¾	7	10 0	3 p.c., July, 94	10 0 0	15,000	South Wales..	12, Mary Axe
Do Preference	... ...	...	10 0	6 p.c., July, 94	10 0 0	7,500	South Wales ..	12, Mary Axe
Newton Chambers,	... 19¼	19¼	20 0	...	20 0 0	7,975	Near Sheffield	Thorncliff Ironworks
Do 6 p.c. Pref.	... ...	21	20 0	...	20 0 0	7,343	Near Sheffield	Thorncliff Ironworks
Niddrie & Benhar	1⅞ 2¼	2 1-80	1 5	2/8 June, 94	1 5 0	88,000	Near Edinbrg	4, York-bldgs., Edin.
North Brancepeth	... ...	...	10 0	...	10 0 0

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

MR. SAMUEL JOHN DAVEY, Dealer in Cornish Mine Shares, Redruth, Cornwall, reports under date of August 23 (4 o'clock) as follows:—We have had sharp fluctuations but not much business in our market this week. Prices followed movements in the tin market. To-day market is dull and inactive Following are quotations:—Blue Hills, ⅜ to ⅝; Carn Brea, 8 to 8⅛; Cook's Kitchen, ¾ to 1; Dolcoath, 68⅛ to 69½; East Pool, 8⅜ to 9½; Killifreth, £2 19s. to £3 1s.; Polberro, 1½ to 1⅝; South Condurrow, ½ to ¾; South Crofty, 1⅛ to 1½; South Wheal Frances, ¾ to 1; Tincroft, 12 to 12½; West Frances, 1⅜ to 2; West Kitty, 6 to 6½; Wheal Agar, 2⅛ to 3; Wheal Basset, 1⅛ to 1⅜; Wheal Grenville, 18⅛ to 19½; Wheal Kitty (St. Agnes), ½ to ¾.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (August 23) as follows:—The mining market at the close of last week and opening of the present one had been exceedingly active, and most shares had a good rise on the improved prospects for tin and copper. Since Tuesday the tin standard has declined £1, and with holders realising at the advance, prices are weaker. Closing prices:—Blue Hills, 8s. 6d. to 10s.; Botallack, 1½ to 1⅝; Carn Brea, 8⅛ to 8⅜; Cook's Kitchen, 1⅛ to 1⅛; Devon Consols, 1⅜ to 1½; Dolcoath, 69⅛ to 70; East Pool, 8⅛ to 8⅜; Killifreth, 2⅛ to 3; Levant, 6⅜ to 7; Phœnix United, ⅜ to ½; Polberro, 1⅜ to 1½; South Crofty, 1⅜ to 1⅜; South Frances, 1⅛ to 1⅛; Tincroft, 11⅜ to 12; West Frances, 2⅛ to 2⅜; West Kitty, 5⅜ to 6 x.d.; Wheal Agar, 3 to 3⅛; Wheal Basset, 2to 2⅛; Wheal Grenville, 19 to 19½; Wheal Kitty, 17s. 6d. to 18s. 6d.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers, and Mining Share Dealers, Redruth, write under date of Thursday, August 23:—The market has fluctuated considerably this week, and at times business has been brisk with a predominance of buyers, but with a reaction in tin, prices generally eased. Dolcoath, Carn Brea, Tincroft, East Pool, Wheal Kitty and Grenvilles freely dealt in, and all low price shares have been wanted. Quotations herewith (four o'clock):—Blue Hills, ⅜ to ½; Carn Brea, 8 to 8⅛; Cook's Kitchen, ¾ to 1⅛; Dolcoath, 69 to 70; East Pool, 8⅜ to 9⅛; Killifreth, 59s. to 61s.; Polberro, 1⅛ to 1⅜; South Condurrow, ⅜ to ½; South Crofty, 1⅛ to 1⅜; South Frances, ¾ to 1⅛; Tincroft, 11⅜ to 12⅛; West Frances, 1⅜ to 2; West Kitty, 6⅛ to 6⅜; Wheal Agar, 2⅛ to 2⅜; Wheal Basset, 1 to 1⅛; Wheal Grenville, 18⅛ to 19⅛; Wheal Kitty, ½ to ¾. Tin, £70½.

MANCHESTER.

Messrs. JOSEPH R. and W. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write August 23, 1894 (noon):—The past week has brought in a majority of lower prices all through the markets for rails, but there is a respectable minority in which the changes are again on the upward side, so with these remarks as for the week, we proceed to record the daily movements therein. Friday last found Home Rails easier as a rule, though the fullest extent of fall in any case was ⅛, and there were less fractions of decline for the most part. In Americans and Canadians small fluctuations occurred on fairly good business, but on the day prices were not altered either way to any extent. Some demand was to be noticed in Coal and Iron shares. Saturday, though usually a very slack day, found Americans pretty brisk at better prices, Home Rails mended somewhat, though more in tone of market than in business doing. Canadians and Mexicans were left alone. On Monday, Home Rails came into favour again under a strong lead in Brighton A, the rise on the day in these being 1¼. A lot of business was done in Americans, but on some realisations latest prices showed some falling away from best points, Mexicans and Canadians both eased off somewhat. Again iron and coal shares were enquired for. On Tuesday, in home rails Brighton A were again 1 up, and London and North Western were fractionally better, but otherwise this market showed some giving way. Americans began well, and prices improved, then went a little "off" again, the last figures, however, still maintained some of the previous rise. In Canadians Grand Trunks, though showing a traffic return rather above expectations, did not show any response worth naming. Yesterday home rails, as a rule, were easier, Brighton A being still exceptional as they continued firm. Americans after a steady opening gave way, and after some little rally closed near to the lowest prices of the day. Nothing doing in Canadians. Mexicans the turn stronger. This morning home rails open within the merest fractions of last night's quotations. Americans on support from the other side open better in most cases than last night's close. Canadians unchanged from last evening, but Mexican ordinary are the turn easier to start with. Consols have gained the merest fraction on the week. Colonial bonds again good. There are no declines to report, whilst the following are higher—viz.: Queensland Inscribed, 1; Victoria Inscribed, 1; and Canada Registered, Cape of Good Hope, New South Wales Inscribed, New Zealand Inscribed, and South Australian Registered ¼ each. The changes in home corporation stocks are again all on the upward side where any change is marked, Leeds Four per Cent. being 1, Douglas Three and a Half per Cent. ½ to 1, Wigan Three per Cent. ½, and Manchester Three per Cent. ⅛ higher. In foreigners variations are irregular, with a balance numerically on the downward side—in most cases, however, do not exceed ½.—Higher; Mexican Six per Cent., 2; Brazilian Four and a Half per Cent., ½; Russian Four per Cent., ½; and Uruguay Three and a Half per Cent., ½.—Lower: Argentine Five per Cent., ½; Portuguese Three per Cent., ½; Brazilian Four per Cent., ⅜ to ½; Italian Rentes, ⅜; Spanish Four per Cent., ⅜; and Egyptian Unified, ½. Rather more has been doing than of late in the several sections of miscellaneous shares, still the total transactions for the week is but meagre. At the same time, changes in quotations are in favour of holders in the great majority of instances, and in nearly all classes.

BANKS quiet, business reported being of quite a straggling character. Quotations show few variations, and those contradictory.—Higher: Imperial of Persia, ½; and Consolidated, 1-16 to ⅛.—Lower; County and District, ½ each.

INSURANCE.—Though very few transactions are marked, save for some repetitions of business in Manchester Fires and Palatines, still advances in current prices are very general, and most, if not all, are worth recording.—Higher: Royal, 1½; Commercial Union, 1; Liverpool, London, and Globe, ½; British and Foreign Marine, ½; Manchester Fire, 5-16 to 7-16; Palatine, 5-16; Reliance Marine, 3-16; London and Lancashire, 3-16; Ocean Marine, ½ to ⅝; Lancashire and Yorkshire Accident 1-16, Thames and Mersey 1-16, and Equitable Fire 6d. to 1s. There are no declines to set against these improved prices.

COAL, IRON, &c.—A fair business in Ebbw Vales at advancing prices, also comparatively in Bolckows fully-paid, with a similar movement.—Higher: Bolckow's fully-paid and £12 paid Ordinary ⅛ each, Ebbw Vales 7-16 to ½. Rhymney 1s. 6d. to 3s.

COTTON SPINNING shares quite a dead letter, and likely to be so for next week or two, owing to the annual holidays in the district.

MINES irregular and little doing, except in Tintos.—Higher: Rio Tintos ½, Tharsis ¼, and Cape Copper ½.—Lower: Ooregum Ordinary 1-16 to ⅛, and Burma Ruby and S. A. Gold Fields 1-16 each.

TELEGRAPHS, &c.—Anglos are all better, the Ordinary and Preferred 2 each, and Deferred ¼. No other alterations marked, and nothing doing save in an isolated marking or two in National Telephone Ordinary.

BREWERIES.—All the changes are on the upward side. Allsopps are 1¼, Guinness 1, Taylor's ⅛, Threlfalls ¼ to 9, and Manchester 1-16 to 3-16 higher.

MISCELLANEOUS.—Changes herein by far the most part in advance without any of very special amount. Amongst the declines also, which are small in number, there are none of more than any fractional amount, Ship Canal Ordinary the turn easier, preference being unchanged. United Alkali Ordinary have lost a little of their recent rise, whilst Salt Unions are a further 1-16 better.

LATER (4 p.m.).—Home rails steady generally, with the Southerners coming in for further demand, and some appreciation in values. Americans, soon after opening, showed strength, which has been maintained up to the finish, latest prices showing no falling away from best points touched. Canadians unchanged, or to any extent worth naming. Mexicans a little lower.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (August 23), writes:—During the past week the market has been more animated, and prices have generally improved principally owing to the recovery in the metal markets, and the continued ease of money.

In shares of coal, iron, and steel companies a fair amount of business has been done. The coal miners' strike is now in its ninth week, and it is thought the men cannot hold out much longer. Grimsby and Broughton Moore Coal and Fire Brick First Mortgage Debenture offered. Bolckow Vaughan are at 11½, Ebbw Vale 8½, Marbella 56s., Niddrie and Benhar 40s., Rhymney 30s. 6d., Steel Company of Scotland 51s., (been 60s.), and Wilsons and Clyde 10½.

In shares of copper concerns a good amount of business done at higher prices. Tharsis have touched 95s. 3d., Cape 28s., Mason 60s., Arizona 10s., and Tinto 15 1-16, and the top prices have been nearly maintained.

In shares of gold and silver mines a moderate amount of business has been done. Montana improved from 13s. to 14s. 6d., and are now about 14s.; a report has been issued showing that the new discovery is expected to hold good. A meeting of the Mosman Company will be held on August 29 to consider a scheme of reconstruction in £1 shares, with 18s. 6d. paid. It has become necessary to raise more capital to cope with water encountered in a promising piece of ground. The Frontino profit for last month was £1896. Noveau Monde wanted. Great Southern Tin and Gold and Newlands Diamond shares offered. African Recovery are at 28s., American Belle 2s. 6d., Australasian 1s. 6d., British South African Chartered 34s. 6d., Broken Hill Proprietary, 61s. 6d.; British North Borneo, 75s. to 85s.; Balkis Land, 2s.; Blue Spur, 2s.; Cassel, 14s.; Caratal, 7½d.; Consolidated Gold Fields of South Africa, 46s. 3d.; Gold Fields of Mysore 23s. 3d.; Graskop, 1s.; Golden Gate (California), 4s. 6d.; Golden Gate (C.T.), 1s. 3d.; Lisbon, 2s. 3d.; Mysore, 50s. 6d.; Mysore Reef (fully paid), 13s.; Oceana, 38s. 9d.; Sunburst, 1s. 6d.; Silver King, 4s.; and True Blue Block, 2s. to 3s.

In shares of miscellaneous companies there has not been much business doing. In oil companies shares Pumpherston are at 5½ and Young's 20s. Lawes' Chemical are at 7½; Nobel's Explosives, 13 11-16; Royal Niger, 20s. to 25s.; Roburite Explosives, 30s.; and White Lead 3s. 6d.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69 Hanover-street, Edinburgh, report as follows under date of August 23:—Prices of Caledonian Deferred and North British railway stocks have changed during the past week. The former from 44 3 16 to 44½, and the latter from 39 1-16 to 38 13-16. Glasgow and South Western advanced from 106½ to 108; Brighton Deferred from 157½ to 160½; South Eastern Deferred from 83 to 84½. In banks, Bank of Scotland have risen from 341½ to 342; National from 336 to 337; Commercial from 68⅝ to 69. Insurance shares have risen. Liverpool, London, and Globe have advanced from 46⅜ to 47⅜: Commercial Union from 32⅞ to 33; North British and Mercantile from 36⅜ to 37½: Northern from 63½ to 65⅜; Royal from 50½ to 50⅝. Scottish American Investment shares have improved from 71s. to 77s. 6d.; Scottish American Mortgage from 53s. 6d. to 55s. Steel Company shares have risen from 46s. to 52s.; Arizona Copper are 2s. 3d. higher at 9s. 9d.; Rio Tinto 5s. higher at 14s.; National Telephone 2s. 6d. higher at 5; Coats 1s. 3d. higher at 18½.

REPORTS FROM THE MINES.

We find it necessary to announce that, owing to the vast numbers of mines, reports, and items of mining intelligence which reach us invariably very late—up to, and frequently after the time of going to press—it is impossible to guarantee the insertion of all of them in the issue in which, in ordinary course they should appear. We always endeavour, however, to make this important feature as complete as possible, and if the secretaries of mining companies, mining captains, and others would kindly make an effort to let their reports, etc., reach us early on Fridays, when it is not possible to let us have them earlier in the week, their doing so would go far to ensure their insertion, and to promote the completeness of our Mining Intelligence.

BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, August 23: Watson's engine shaft. In the 172 fathom level east the lode is again becoming productive, and is yielding 2 tons of copper and mundic ores per fathom. In the 160 fathom level east the lode is 3 feet wide, composed chiefly of capel. In Harvey's winze sinking below the 160 fathom level east the lode is 4 feet wide producing 3 tons copper and mundic ores per fathom for length of winze—9 feet. In the 148 fathom level east there is a promising lode orth 3 tons of copper and mundic ores per fathom. The stopes throughout the mines are turning out good quantities of copper and mundic ores.

GREEN HURTH.—August 17th: Annie's vein. At the south forehead the vein is improving for lead, worth 2 tons per fathom. The stope in the back of the above working is producing some fine lumps of ore. The end is worth 3 tons per fathom.—South-west branch vein. This working is without change since my last report. The end is worth 2½ tons per fathom.—West crosscut south of Swan's shaft. At this point we are daily expecting to meet with the south west branch vein.—W. Gray.

GREAT LAXEY.—August 22: Considering the rather long stretch of probably unproductive ground yet remaining to be driven through (some 80 fathoms) lying between the 295 end and the Dumbell shaft, the better progress made of late is the more satisfactory. The rock in the present end, however, is not quite so favourable as for some weeks past. In the 302 fathom level cross cut, driving west from Dumbell's shaft, we are now evidently nearing the lode, the ground being easier, with a little water oozing from the joints. Excepting a few feet of comparatively dead ground, the 278 end north continues to open up a fairly good lode, the last 2½ fathoms assaying in value £15 per fathom, while the present end is worth £18 per fathom. The new winze in the 266 is not so good at present, having fallen in value from £18 to £8 per fathom; but we hope the decline is only temporary. At no other point is there any change worth noticing.—(Signed) W. H. Rowe.

HOLCOMB VALLEY.—In advices dated July 31st the manager reports that some additional pumping power has been supplied, and that as a result of this, and of alterations and improvements in existing plant, he can for the future depend on treating 300 cubic yards per day of 10 hours, and little is required to complete plant to a capacity of 400 cubic yards.

LEADHILLS.—W. H. Paull, August 20: Brown's Vein. In the 160 fathom level driving north of Wilson's shaft and south of Jeffrie's shaft the vein is without any material change. The various other points of operation continue much the same as last reported on, and stopes are producing about their usual quantity of lead ore. In cross cutting west at the 100 fathom level north of Wilson's shaft another joint has been intersected with a little spar, &c. thereon, but of no importance. The cross cut is therefore being pushed ahead to fully prove this point. The drawing, dressing, and all surface works are being pushed forward regularly.

WEARDALE.—Report on Weardale Company's mines for week ending August 18: Groverake. Adamson's drift west, vein continues sparry, worth 16 cwts. per fathom. Loop level to take water from Rake level, strong sparry vein, no ore to save. Groverake cubic fathom stopes, worth 14, 14, 14, 14, 14, 14, 14, and 12 cwts. per fathom. Tribute ore raised for the week, 23½ bings.—Boltsburn. Stope above Watts level in vein worth 12 cwts. per fathom. Stope in north flatt worth 14 cwts. per fathom Stopes in south flatt worth 23, 36, 16, 40, 30, 18, 18, 20, 18, and 20 cwts. per fathom.—Greenlaws. Nattrass gill drift, stopes worth 15, 15, 18 and 14 cwts. per fathom. Lowes drift, Fairless rise, vein 3 feet wide of fluor spar mixed with ore and stone. Lees sump, stope worth 28 cwts. per fathom. Greenlaws tribute ore raised for the week 22 bings.—Sedling, 64 level east strong vein, improved, worth 14 cwts. per fathom. Stopes above 64 level east worth 16, 16, 16 and 16 cwts. per fathom. Stope above 64 level west worth 18 cwts. per fathom. The 74 cross cut in scar lime has been driven 1 foot. End does not look well. South vein Stobbs drift east end worth 12 cwts. per fathom. Ore raised for the week, 67 tons. Ore dressed for the week, 73 tons. Ore, slag, and fume smelted for the week, 121 tons; producing 63 tons of pig lead.

COLONIAL, INDIAN, AND FOREIGN MINES.

DON PEDRO.—August 23: Mr. Touzeau and Capt. Jeffery arrived at the mine on the 18th ult., and immediately set to work. Mr. Touzeau reports that some of the timbers in the upper part of the shaft require renewing, and adds: The shaft is being sunk, and the prosecution of this upon the plan agreed on, as also the repairs indicated, will be prosecuted with all possible speed. Adit in good order. The ground is good, speed of driving ditto, and expenses per fathom, low.—Reduction department. Before re-starting this some small repairs and alterations are desirable—indeed, imperative.

ELKHORN.—Copy of Mr. C. A. Molson's monthly report for July: Mine. Ore Breaking Department. 550 feet level south, south end stope. The vein is 30 inches wide, and the value 41 ounces. The ore is dry and hard.—650 feet level south. No. 2 stope. The vein is 3 feet wide, and the value 50 ounces. A small amount of lead ore is found here.—750 feet level, north: Cross cut raise stope. The vein is 2 feet wide, and the value is 35 ounces.—Inside stope. The vein is 6 feet wide and the value 40 ounces. Connection was made here during the month with the bottom of the 650 feet north stope, showing the continuity of the ore body. Some high-grade smelting ore is found in the back stope.—850 feet level, north. The vein is 7 feet wide, and the value 40 ounces. The ore is all of the dry or milling class, part of it being of the porphyry variety, usually met with in this side of the shaft.—950 feet level, north: South end. The vein is 6 feet wide, and the value 60 ounces.—Back stope. The vein is 5 feet wide, with the foot of the stope still in ore, which assays 40 ounces. The raise was holed to the 850 feet level during the month the total length of the ore from track to track being 146 feet.—1050 feet level, south: Back stope. The vein is 2 feet wide, and assays 30 ounces.—North of the shaft; Outside stope. The vein is 30 inches wide, and assays 45 ounces.—Inside stope: The vein is 2 feet wide, and assays 38 ounces.—1150 feet level, south. The vein is 2 feet wide, and assays 28 ounces.—1350 feet level south. Footwall cross cut. The vein is 18 inches wide, and assays 70 ounces and 6 per cent. lead. The greater part of the ore has been stoped above the cross cut; that remaining in the bottom is being brought under attack from the back of the next lower level stope.—Centre stope. The vein is 18 feet wide, and assays 26 ounces.—South end stope. The vein is 10 feet wide, and assays 36 ounces.—1450 feet level south. Back stope. The vein is 8 feet wide, and assays 75 ounces and 6 per cent. lead. The ore is partially oxidised.—Centre stope. Foot of main raise. The vein is 6 feet wide, and assays 140 ounces and 10 per cent. lead. The ore carries a high percentage of zinc blende, which replaces, in part, the lead contents of the vein.—South end stope. The vein is 3 feet wide, and assays 25 ounces.—North of the shaft. Raise stope. The vein is 3 feet wide, and assays 33 ounces.—1550 feet level south. The vein is 4 feet wide, and the value 38 ounces. Some bunches of higher grade galena are showing up in the back stope.—1650 feet level south. Inside raise stope. The vein is 2 feet wide, and the value 73 ounces, with a small percentage of lead. The ore is all sent to the mill.—Prospecting department. 1250 feet level, south. A cross cut was started at the north end of the main stope. The white footwall sandrock being met 6 feet in, the work was stopped.—North of the shaft: Outside raise. Advanced during the month 29 feet 5 inches. Nothing of value was met with.—1350 feet level, north. The raise has been put up a total distance of 59 feet. No ore of value was found here. An intermediate drift was run southerly, which disclosed a small body of oxidised ore, which is now being prospected.—1650 feet level, south: Footwall cross cut. A cross cut is being put in at the foot of the main raise. The ground is broken and full of low grade quartz seams. The breast is now in 15 feet from the level. At the 1650 feet level the north station has been cut for the chute for the sinking shift. The small station pumps have been removed to this level, and the Baby hoist is being placed in position in order to resume sinking the shaft about the middle of August. The amount of water in the mine has increased to a very slight extent up to the present time. This will probably enable us to resume sinking earlier than was anticipated. The tank pit has been cut, and the sinking tank placed in position.—Amount and source of ore broken. 650 level 39 cars, 750 level 183 cars, 850 level 100 cars, 950 level 164 cars, 1050 level 169 cars, 1150 level 139 cars, 1250 level 84 cars, 1350 level 314 cars, 1450 level 347 cars, 1550 level 58 cars, 1650 level 125 cars, total cars hoisted 1722. Number of tons 1171.—Milling department. The mill was shut down for four days during the month for a thorough overhauling of the machinery and replacing the fire end section of the roaster. This is the first general shut down since the early part of November last.—Table of work performed in July. Ore on hand August 1, 57·64 tons, raised from the mine (this includes 15 tons of slimes from the pits) 1171 tons, less smelting ore 162·31 tons, waste sorted out 94 tons, 256·31 tons, 914·69 tons, add for salt 99·50 tons, add for mill pulp recrushed 23 tons, dry ore panned 1050 30 tons, pulp in the mill 10·53 tons, rough ore in stock 33 tons, total 1093 83 tons.—Table of millwork. Dry tons panned 1050·304, average assay value 40·51 ounces, average percentage salt used 14 per cent., average value of tailings 3·63 ounces, average percentage saved 92·03 per cent., number of Doré bars produced 40, number of ounces fine silver 37,654·950, number of ounces pure gold 22·665, batteries in service 25 days 18 hours, pans in service 27 days, estimated value of bullion shipped $22,595, actual returns for ore shipped $11,698·41, total $34,293·41; current expenses, including salaries, labour, and supplies, &c., $20,145·90, balance, being profit for July (or at $4·85 to £ sterling, £2917), $14,147·51.—Surface Department. Fuel. The deliveries by the contractors have been more satisfactory, and the supply in the yards has been increased slightly.—Water. The surface supply is falling gradually, the warm weather having melted the greater part of the heavy snowbanks on the ranges.—Railroad strike. There was no trains on the branch until the 21st of the month. The stoppage of traffic caused us some trouble and delay in the shipment of ores to the smelter, but otherwise it did not affect us materially. The supplies which were tied up by the strike have all reached us, and everything is running smoothly again.

GOLD FIELDS OF TIERRA DEL FUEGO.—Under date of July 13 Mr. J. M. Parsonson, the company's representative in Mozambique, reports that he has arranged with the leader of an expedition which left on July 12 to peg off claims for the company, and that with regard to certain other reefs, as to which he has definite information, claims will be pegged off if the reefs on prospecting prove to be good. Mr. Parsonson adds that he expects to receive good reports shortly.

SUTHERLAND REEF.—Manager writes, July 26: During past week west drive has been advanced 8½ feet, making a total of 93 feet, and the east drive 11 feet, making a total of 68 feet. The reef in both drives still continues good. We are now getting a good supply of timber for the main shaft, and hope shortly to get the skip road completed to the 200 feet level. This would have been completed much sooner but for the great difficulty we have had in getting timber.

ALMADA AND TIRITO.—Report for the month ending July 28: Dios Padre. The 350 feet level driving north has been extended 24 feet 2 inches by four men. The lode is slightly mineralised, but is not so wide as usual. It contains stringers of quartz stained with copper. The 250 feet level driving north yields some good stones of green ore, but not in paying quantities. The lode is compact and carries a good wall; 19 feet 3 inches were driven by four men. The 250 feet level driving south was extended 12 feet 7 inches by three men. The ground is easier for driving, and the lode is well defined and yields occasional stones of ore.—Stopes. The stopes back of the 24 fathoms level on the 100 lode, and north and south of No. 2 winze on the main lode continue to yield good quantities of ore, but the grade is lower. The Cruz Verde stope, having become poor, has been suspended.

ALAMILLOS.—Mine report dated August 15: In the 85 fathom level driving west of Taylor's engine shaft, the lode is heaved by a small crosscourse. The lode in the 160 west of the same shaft is wide with lead disseminated throughout, valued at 1½ tons per fathom. In the 100 west of Judd's engine shaft, worth ½ ton per fathom, the men are making good progress. The lode has a promising appearance in the 100 east of that shaft, and is valued at ¾ ton per fathom. Miguel's winze sinking below the 20 fathom level, the lode has fallen off in value, and is now estimated at 1½ tons per fathom.

BAYLEY'S REWARD CLAIM.—Mining report dated Coolgardie, June 30: Sylvester shaft, South drive 220 feet level has been advanced 8 feet on the south leg of the lode, total now being 77 feet from shaft. I reported in my last that between the enclosing walls there were making bunches of stone; this has now made into a solid body of laminated stone over 3 feet thick, with well-defined walls, which, from appearances, I should say, will continue for some distance without further breaks or disturbance. The lode carries a good deal of mineral, and as we continue south should contain good gold. West crosscut (Gorrie's lode) has been extended 15 feet, total 82 feet from shaft. 160 feet level driven 12 feet for the week, total 122 feet from shaft; no particular change to report.—100 feet stopes. Little or no change to report; still yielding rich stone as usual.—Begelhole shaft. Stopes are also looking well, returning very good stone indeed.—Cockshott shaft. Have been chiefly opening out chamber at 60 feet level and timbering, consequently, no particular change.—Everard Shaft. South drive extended 8 feet, total 95 feet from shaft, last week lode slightly pinched. This week making larger and carrying good gold and to all appearance in a few feet will resume its usual size.—Battery. In consequence of the repairs to the boiler being more extensive than we at first anticipated we could not resume crushing at the time mentioned in our telegram. We did all that was possible, but could not get to work until yesterday morning, so that it would be too late to clean up and return the usual week's yield. Everything is now working well, and we shall continue the crushing as rapidly as possible during the coming week, and we fully anticipate returning the usual fortnight's yield so that there shall be no difference in the quantity of gold despatched owing to the stoppage.—Strong Room. For the storage of the rich stone we have now erected a large strong room to be used instead of the tent as formerly.—Timber for battery. During the week we have managed to engage a horse team on reasonable terms to bring on the mine the timber required for the second 10 stamps, and will commence some portion of the foundations probably on Monday or Tuesday next.—Gold. We have now the usual amount of fortnight's gold for the escort on hand, which will not leave until Saturday next, when we hope to forward the two fortnights' yields.—(Signed) W. H. Matthews.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for week ending July 11: Blackwood, No. 1 shaft, 200 feet level. In the uprise over north drive off east crosscut, we have been working on small patches of carbonate ore, and are following same northwards.—400 feet level. The north drive off west crosscut has been driven 6 feet, making its total length 27 feet; face showing hard sulphides mixed with mullock. The south drive off west crosscut has been extended 14 feet during week, making its total length 42 feet; face here in same material as in north drive, but of a softer nature. Howell, No. 2 shaft, has been sunk 7 feet for the week, total depth below 200 feet level 93 feet; bottom showing mullock carrying patches of sulphides.—200 feet level. The east crosscut off end of south drive on 10th floor of far north stopes has been driven 13 feet, total length 33 feet, all the distance through mullock. This cross cut will prove the eastern vein at this point.—Retallick shaft, 115 feet level. The winze in end of No. 3 west cross cut has been sunk during week 6 feet, total depth 72 feet; a better class of sulphide ore is now showing on the western side of the winze.—Marsh (No. 6) shaft, second level. Have started a west cross cut off end of north drive off No. 3 east cross cut to connect with main south drive, and have extended same 6 feet, face getting mixed with mullock in roof, with sulphides showing in bottom. The south west drive near junction boundary has been driven 5 feet, total length 79 feet; face in fair grade sulphide ore. We are working north and south above Nos. 2 and 3 west cross cut, and are breaking some good grade carbonate ore which runs in chutes.—Stopes No. 2 west crosscut, north stope. We broke and hoisted for the week 3 tons of ore averaging 29 per cent. of lead and 28 ounces silver per ton.—No. 2 west crosscut, south stope. Ore broken this week 15 tons first class ore, assaying face sample 29 per cent. lead and 145 ounces silver per ton and 5 tons second class ore, assaying 11 per cent. lead and 40 ounces silver per ton.—No. 3 west crosscut, north stope. We obtained about 8 tons second class ore, averaging 12 per cent. lead and 28 ounces silver per ton.—No. 3 west crosscut, south stope. We have broken during the week about 9 tons second class ore, averaging 14 per cent. lead and 31 ounces of silver per ton. Assays of carbonate ore for the week vary from 3 per cent. to 45 per cent. of lead, and from 8 ounces to 233 ounces silver per ton. The workings in Blackwood No. 1 shaft, Howell No. 2 shaft, and Retallick shaft show no particular change.

CRAVEN'S CALEDONIA.—The following fortnightly report has been received from the mine, dated Charters Towers, 5th July:—No. 9 level has been extended an additional 10 feet, making a total of 262 feet from the slide. The reef is about 6 inches thick. In the first stope over this level the reef is pinched, but in the next four it will average 10 inches. The winze going down from No. 9 level has been sunk an additional 11 feet, making a total of 133 feet from the level. The reef remains about the same. In the underhand stope from the level the reef is still about 10 inches. No. 8 level has been extended a further distance of 7 feet, making a total of 341 feet from the slide. The reef is about 8 inches thick. In the first two stopes over this level the reef is about 9 inches thick, but in the rest of this block of ground the reef averages 10 inches. No. 6 level has been extended a further distance of 6 feet, making a total of 294 feet from the slide. The reef in this level is about 6 inches thick. In the two stopes over the level the reef will average about 7 inches. I have still got three men on each shift in front of the cross cut from No. 4 level on about 1 foot to 15 inches of stone, which seems to be of very fair quality. The haulage of quartz for the fortnight from these workings is 153 tons, making a total of 779 tons for the present crushing. At the Victoria and Queen shaft the eastern level has been extended 9 feet, making a total of 27 feet from the boundary peg. The reef in this level is about 4 inches thick, and the reef in the three stopes averages about 9 inches. The footwall in the first pass has been taken up another 7 feet, making a total of 47 feet from the level. We have raised 12 tons of quartz from these workings, making a total of 23 tons in the paddock.—(Signed) G. Cabassi, manager.

COROMANDEL.—Superintendent's report for fortnight ending July 28: Coromandel shaft, 420 feet level north. Since last report the lode here has gradually increased in size, until now it carries quartz the whole width of the end. The assay value is still low, but we hope this will improve as we get further into the shoot. Distance driven 23 feet 2 inches, total from shaft 276 feet.—420 feet south. The lode in this level has also slightly improved in size and quality, being 9 inches wide, worth ½ an ounce of gold per ton. Driven for the fortnight 15 feet 3 inches, total 123 feet 10 inches. 320 feet level north driven 18 feet 3 inches, total 446 feet 3 inches from shaft. During the past month the lode in this level has split up into several branches that carried in the present end being 6 inches wide, and worth 12 dwts. of gold per ton.—Prospect shaft, 500 feet level north driven 28 feet, total from cross cut 50 feet 6 inches. The lode is 3 inches wide, and carries a little gold. 500 feet cross cut west of shaft driven 12 feet 10 inches, total 49 feet 6 inches; 6 feet back from the present end we passed through a dolerite dyke about 7 feet wide, but no quartz reef has yet been discovered. 440 feet cross cut east has been advanced a further 14 feet. The improved character of the schist noticed in my last report has gradually become more marked until to-day we opened a lode 1 foot 6 inches wide, of hard compact quartz, worth by assay 3 dwts. 4 grains per ton. The base between this and the surface outcrop is so great that we do not consider it the eastern lode, and the cross cut is therefore being continued.—No. 2 winze under 440 feet north. Since the lode cut out this winze has, on account of the shattered nature of the ground above, been continued underneath the slide. We have now reached the required depth for the 500 feet level, and during the coming fortnight shall break through and endeavour to pick up the lode on the other side.—Prospecting work. Our prospecting operations at surface have resulted in the discovery of a reef about 200 feet west of Prospect and 700 feet west of Coromandel Reef. This has been named No. 3 reef, and to prove it in depth a trial shaft has been started to sink upon its course. This has been sunk during the fortnight 33 feet. The ancients had followed a reef to a depth of 25 feet, where we found potsherds and stones showing visible gold. Beneath this the lode is 4 feet wide, carrying several branches of quartz, the assay value of which is 4 dwts. per ton.

CHAMPION REEF.—Fortnightly report of Captain James Rowe, superintendent, dated 30th July: Garland's shaft. This has been sunk 18 feet, total depth 744 feet. After passing through the limb of the dyke about 2 feet wide we intersected the lode, which is found to be 4½ feet wide, assaying 1 ounce 12 dwts. of gold per ton. The 630 feet level north of crosscut west of shaft has been driven 25 feet 6 inches, total length 101 feet. Lode 3 feet wide, assaying 1 ounce 16 dwts. 8 grains of gold per ton. No. 1 rise in back of level risen 18 feet 6 inches, total height 35 feet. Lode 4½ feet wide, assaying 1 ounce 18 dwts. 20 grains of gold per ton. Winze below 630 south of crosscut sunk 15 feet, total depth 27 feet 6 inches. Lode 2½ feet wide, assaying 12 dwts. of gold per ton. The 530 feet level north of west crosscut has been driven 31 feet 6 inches, total length 581 feet 3 inches. Lode 3 feet wide, assaying 1 ounce 16 dwts. of gold per ton. No. 4 rise in back of level risen 20 feet 3 inches, total height 67 feet 6 inches. Lode 3 feet wide, assaying 1 ounce 2 dwts. 3 grains of gold per ton. The 440 feet level north of west cross cut has been driven 24 feet 9 inches, total length 501 feet 3 inches. Lode 4½ feet wide, and assaying 1 ounce 15 dwts. 7 grains of gold per ton. No. 3 rise in back of level risen 13 feet 6 inches, total height 27 feet. Lode 4 feet wide, assaying 1 ounce 10 dwts. 8 grains of gold per ton. The 340 feet level south of No. 2 west cross cut north of shaft driven 30 feet 6 inches, total length 102 feet. Lode 2½ feet wide, assaying 1 ounce 15 dwts. of gold per ton. No. 3 rise in back of 340 north of No. 1 west cross cut risen 27 feet 3 inches, total height 95 feet 3 inches. Lode 3½ feet wide, assaying 18 dwts. 5 grains of gold per ton. No. 2 or incline winze below level sunk 9 feet 6 inches, total depth 115 feet 6 inches. Lode 3½ feet wide, assaying 2 ounces 5 dwts. 21 grains of gold per ton. Winze below 240 north of west cross cut north of shaft sunk 19 feet 6 inches, total depth 64 feet. Lode 3½ feet wide, assaying 2 ounces 17 dwts. 12 grains of gold per ton.—Ribblesdale's shaft. This has been sunk 6 feet, total depth 563 feet 6 inches. Lode small and without value. We are engaged at present cutting bottom plat at the 540 feet level, consequently the sinking of the shaft is suspended for a short time. The 540 feet level north of shaft has been driven 20 feet, total length 67 feet 9 inches. Lode 6 inches wide, assaying 18 dwts. 20 grains of gold per ton. 440 feet level south driven 20 feet 3 inches, total length 373 feet 3 inches. Lode very small, yielding a trace of gold.—440 feet level, south of west cross cut, north of winze. Sunk below 340 feet level north of shaft, on south part of fold, has been driven 5 feet 9 inches, total length 51 feet. This is holed to 440 north of winze, on east part of lode. We drove the cross cut further west, and have driven 11 feet 6 inches, and intersected another part of the lode on which we have driven south 15 feet 9 inches. Lode 2 feet wide, assaying 2 ounces 10 dwts. 13 grains. of gold per ton. The 340 feet level south of shaft has been driven 15 feet, total length 709 feet 9 inches. Lode small and without value. Rise in back of level risen 10 feet 6 inches, total height 99 feet. Lode 1 foot wide, assaying 1 ounce 2 dwts. 3 grains of gold per ton.—Carmichael's shaft. The 315 cross cut west of shaft has been driven 23 feet 9 inches, total length 412 feet 6 inches. We have not met with anything further since passing through a small lode.—Rowe's shaft. This has been sunk 9 feet 6 inches, total depth below the 315 feet level 60 feet 9 inches. Lode 2 feet wide, assaying 3 ounces 8 dwts. of gold per ton. The 315 feet level north of shaft driven 26 feet, total length 151 feet. Lode 1 foot 3 inches wide, assaying 2 ounces 14 dwts. 1 grain of gold per ton. Winze below 315 south of shaft sunk 12 feet, total depth 33 feet 3 inches. Lode 4 feet, assaying 1 ounce 12 dwts. 9 grains of gold per ton. Rise in back of level risen 13 feet 6 inches, total height 79 feet. Lode 6 feet wide, assaying 1 ounce 3 dwts. 14 grains. of gold per ton.

EAGLEHAWK CONSOLIDATED.—The following fortnightly report has been received from the mine, dated Maldon, July 7: During the fortnight the contractors have sunk the limited shaft 6 feet, making the shaft 1026 feet from the surface to the bottom of the well. The contractors have started the plat at the 1000 feet level, timbered the well and put the runners in the well, and timbered about 50 feet of the shaft above the 1000 feet plat. There is a small leader of quartz in the bottom of the shaft about 2 inches thick. The tributers, Smith and party, are getting a little gold, but not rich. Harris and party have had another small crushing, which yielded 11 ounces 18 dwts. of melted gold. Sampson and party are not doing much, they cannot find much solid ground in their tribute to the depth they have been.—(Signed) Thomas Hodge.

FRONTINO AND BOLIVIA.—Report dated La Salada, July 6: Silencio. The sinking of the main shaft has progressed very favourably, and the cutting of a large plat for the dumping of mineral from the inside workings in the No. 6 level, is almost finished. The lode in this level north is in good ore, and is now the best part of the mine, the south end is not quite so rich, but is fairly good. Special attention is at present given to these drivages to open up stoping ground to No. 5 levels. The lode in the No. 5 level north, which has been mentioned in previous letters as having been split and apparently leaving, making a turn in its general course, has been proved to exist in the hanging wall, and will be worked on in future. This level south is in very mixed ground, and, although poor at present, the drivage is continued with the hope that the lode will soon develop itself into a regular defined vein. The communication is made between the No. 4 and No. 3 levels north, and the two branches will evidently eventually form a junction a little further ahead. In this level, the No. 3 south, the lode is larger and better than it has ever been since the drivage was resuscitated two years ago. The new hoist works on the surface, for use in the south engine shaft is ready, the skiproad nearly finished down to the No. 4 level, and I hope soon to hoist all the mineral from the south part of the mine by this, thus relieving the present whim. The stopes are not so good, having fallen back everywhere, and our "diarios" from the mills are at present rather low, but as soon as the No. 6 is advanced sufficiently for stoping, it may be hoped that the produce will be much better. It is intended to start a crosscut in the No. 4 level north to intersect the Nemeneme lode, a distance of 340 feet. This crosscut will be driven through a crosscourse which is of soft, friable material, and will be very advantageous in the drivage. If mineral of even moderate value is cut it will make another mine, and the Nemeneme is untouched from the surface down, and, therefore, there will be very nearly 500 feet of backs for stoping should the mineral be worth extracting. I have taken these steps to open stoping ground sufficient for the additional 16 stamps at Maria Duma, and also not to be pressed in the sinking of the main shaft after the No. 7 or 500 feet level is opened. I am quite convinced that the best and most profitable way to work the Silencio Mine is to make large crushings, and as we have ample water and a new large wheel, this can be done. Further particulars of this work will be given in my half-yearly report.—La Salada. Although there have been slight interruptions, the sinking of the main shaft has gone on fairly well. A "pentice" or large hinged door has lately been put in to protect the shaftmen, and the hoisting and shaft work go on together now continuously without fear of accidents. The lode in the No. 6 level has not improved and the stopes are rather below the average quality of La Salada ore. The water seems to have increased slightly, probably the consequence of advancing towards the old Salada Mine. The flat lode is exceedingly rich, where intersected, and the parts which have been worked thus far; but as very little has been done, I defer giving an opinion as to its probable future until it is opened up more. At the time of writing it is about 3½ feet wide, strong and well-defined, yielding pyrites abundantly. This lode has never been worked in this section, and consequently stands intact to the surface from the No. 6 level.—Cordoba. The No. 3 crosscut continues in the same kind of hard ground, and its compact nature makes it difficult to drive through; however, fair average progress has been made. The No. 7 level north has continued to vary in size and quality. It is now small and comparatively poor. This, I hope, will change, as we advance further under Rosario. The stopes are much the same in quality as they have been for some months past, average ore.—Tigrito, La Humedad. The lode in the crosscut is very broken, and until some further drivage is done it is difficult to say anything about it. Another crushing will be made soon of the ore which has been extracted.—Marmajito and Marmajon. In driving the No. 2 level, a lode has been met with, which it appears was worked on some years ago by a tributer, but near the surface. The lode was not quite through when last examined, but as soon as possible it shall be assayed. It looks good, and about 2 feet wide. The Marmajito lode is calculated to be 170 feet further, and should it and the first mentioned prove of average quality, there will be ample ore for the mills of both this mine and Marmajon, should the latter not turn out as expected. At Marmajon the lode in the deep level crosscut has been disappointing thus far, and the drivage east has been suspended for a while, until something more is known of the western ground.—General. Taking the mines throughout, there is a slight improvement all round, although the diarios from the mills are small.—Sulphurets. The amount of these for the month of June is a little over 24½ tons. We are still as badly off in the matter of transporting them to Zaragoza as we have been for some months past, and as the quantity increases the difficulty becomes more serious. I hope, however, that with the arrastras in the Salto we shall be enabled to obtain a richer sulphuret by grinding repeatedly, and as the Pelton wheel there is powerful enough to run double the number of arrastres, the intention is to slowly add to the four now almost ready to work, until the full power of the wheel is employed.—La Salada new mill. This work is progressing very favourably, the excavations for the foundations and the levelling for the concentration department are almost finished. Most of the timbers are cut and selected for the framework, but only a very few pieces of the machinery have as yet arrived, although a large quantity is in Zaragoza. A large building is erected near the mill site to be used as blacksmiths' and carpenters' shops, store rooms, captain's and officers' rooms, kitchens, and also two additional rooms for any purpose that may be required during the erection of the machinery.—Geo. W. Eustice.

FORTUNA.—Mine report, dated August 15: Canada Incosa Mine. The lode in the 150 fathom level driving west of O'Shea's engine shaft continues regular, but is rather small, and is valued at ½ ton per fathom. In the 110 west of San Pedro's shaft the lode has become unproductive during the past week.—Los Salidos Mine. The 200 east of Taylor's engine shaft continues to open out good stoping, and is worth 2 tons per fathom. The lode in the 105 east of Palgrave's shaft turns out good lumps of ore occasionally. Luca's winze sinking below the 92 fathom level the lode show a little improvement, valued at ¾ ton per fathom. There is no change of importance to record in the stopes since last reported. Surface works are kept on very regularly, and the machinery is in good working order. Estimated raisings for August 250 tons. The tributers returned 87 tons of mineral in the past month.

GOLD FIELDS OF MYSORE.—Report on prospecting operations, dated July 31:—West Balaghat block, No. 1 shaft. North drive at the bottom of this shaft 117 feet from surface has been driven 10 feet 6 inches, total distance from shaft 69 feet 6 inches. Lode in the end 1 foot 6 inches wide, assaying 12 dwts. 9 grains of gold per ton. South drive has been driven 7 feet 6 inches, total distance from shaft 78 feet 6 inches. Lode in the end 2 feet 3 inches wide, assaying 11 dwts. 5 grains of gold per ton.—No. 2 shaft. This has been sunk 6 feet 9 inches, total depth from surface 144 feet. Lode in the bottom 1 foot 6 inches wide, assaying 7 dwts. 5 grains of gold per ton. North drive 100 feet from surface has been driven 6 feet 3 inches, total distance from shaft 73 feet 6 inches. Lode in the end 2 feet 6 inches wide assaying 6 dwts. of gold per ton. South drive has been driven 6 feet 7 inches, total distance from shaft 88 feet 3 inches. Lode in the end 1 foot wide, assaying 11 dwts. of gold per ton.—No. 3 shaft. We are erecting a small winding engine and poppets heads at this shaft.—No. 4 shaft. This has been sunk 8 feet 3 inches, total depth from surface 138 feet 5 inches. Lode in the bottom 1 foot 6 inches wide, assaying 8 dwts. 8 grains of gold per ton.—Road Block, Shaft No. 3 north, No. 2 eastern lode. North drive 53 feet from surface has been driven 9 feet, total distance from shaft 20 feet; no lode. South drive has been driven 19 feet 8 inches, total distance from shaft 41 feet 2 inches. Lode in the end 3 feet wide, assaying 4 dwts. of gold per ton.—North shaft. This has been sunk 7 feet 6 inches, total depth from surface 60 feet 6 inches. Lode in the bottom 1 foot 4 inches wide, assaying 11 dwts. of gold per ton.—Trench 3000 feet east of the above. This trench has been made 81 feet long, 11 feet deep, and 3 feet wide. We met with a few stringers of quartz in this of no value. It has been suspended.

GOLD FIELDS OF MYSORE.—Mine report for fortnight ending July 30: Oriental lode, south shaft. The 470 feet level north of shaft has been driven 6 feet, total length 107 feet. Lode 2½ feet wide, assaying 12 dwts. 9 grains of gold per ton. 470 feet level south driven 6 feet 3 inches, total length 117 feet 9 inches. Lode 4 feet wide, assaying 1 ounce 14 dwts. 2 grains of gold per ton. The 380 feet level north has been driven 5 feet 2 inches, total length 211 feet 4 inches. Lode small, is 6 inches wide, assaying 6 dwts. 8 grains of gold per ton. The 380 south driven 5 feet 6 inches, total length 204 feet 3 inches. Lode 2 feet wide, assaying 12 dwts. of gold per ton. The 280 crosscut east of shaft has been driven 5 feet, total length 252 feet 9 inches. The strata is without much change since passing through the vein of quartz mentioned in the last report.—Prospecting work. Captain Williams is sending a report by this mail. We are erecting a small winding engine on No. 3 shaft West Balaghat Block to enable us to cope with the water and sink the shaft deeper. We hope to get this to work in a short time.

KEMPINKOTE.—Superintendent's report for fortnight ending July 30: Garland's shaft has been sunk 9 feet, making a total depth of 213 feet. This represents 12 days steady sinking. A short delay was necessary, while some extra timber was being fixed at 183 feet. The ground is the same as last reported, and the bottom still continues to be wet. 183 feet drive south has been advanced 37 feet 6 inches, making a total length of 86 feet. We had again to drive through a few feet of country rock, but by altering the course of the drift we regained the lode, which we now carry for the full width of the drive, its present value is 9 dwts to the ton. 183 feet cross cut east was restarted by machine on the 19th instant, and has been advanced 21 feet 6 inches, making a total length of 116 feet. At 105 feet distance from the shaft we cut a lode to the value of 6 dwts. to the ton. We are still driving in this lode, and as yet have no indications of a footwall. The present value of the lode is 10 dwts. to the ton.—Henty's shaft. All work in connection with the plunger lift having been completed the pump was restarted on the 26th instant, having been stopped for a few days. We shall be able to start sinking in the course of a few days. 173 feet drive south has been advanced 10 feet 6 inches, making a total length of 104 feet. On the 18th in-

stant the machine was stopped driving as the state of the ground rendered it impossible, and driving by hand labour commenced. The ground is extremely heavy and wet. The driving was delayed for sometime owing to alterations to the pitwork, and to the stoppages of the pump. We will be now able to push the drift ahead.

LINARES.—Mine report dated August 15: Pozo Ancho Mine. In the 200 fathoms level, driving west of Peill's engine shaft, the lode is small and unproductive. The lode in the 155 west of the same shaft, valued at 1 ton per fathom, continues regular and compact. In the 178 west of Warne's cross cut the lode is small and without value. No. 276 winze, sinking below the 171 fathoms level, the lode is regular and contains quartz and stones of lead ore.—Quinientos mine. Taylor's engine shaft. The 185 east continues to produce stones of ore, but not sufficient to value. In the 165 east the lode has very much improved in the last fortnight, and is easier for driving, valued at 2 tons per fathom. The lode in the 150 east is wide and strong, composed of carbonates of lime with spots of lead ore. In the 130 east the lode is small and without ore to value. Gini's winze sinking below the 150 is now completed to the 165 fathoms level, worth ½ ton per fathom. Barranco's winze below the 165 fathoms level, the lode is strong and of a promising appearance.

LOMA.—The mine superintendent reports under date 8th ultimo: Mine. On the 5th instant I cleaned up the sluice, which gave 168 ounces of amalgam. This, with 8 ounces of bought gold, gives a bar worth $1309 80. We expected better results, but ore in the ground cut a good show of gold all over it. This must be cleaned up dry, and will take at least 17 days to scrape up clean. As we must continue washing in this cut, it would simply mean a loss of time to clean it up now, and we will leave it till after next run, when it will be cleaned up once for all, and sluice laid in cut at same time.—Soto mine. Every hour we turn water off presents face. We turn it on hard. At present our washing is to cut some ridges that we may get in the mine pipe in a good and safe position. I enclose you over 9 dwts. of gold from here as a small sample. This we found without getting on the bed rock, and it is now certain we will find the gold here coarser than in our present face. We have in 90 feet of 3 feet sluice, and in a few days will get in 40 feet more. The cut for our sluice has been in very hard rock, but we are laying it in such a manner that large slides of bank and rock are not apt to damage sluices.—Reservoir. We have 44 men on this now, and they are doing good work. We are putting in the best round timber to be obtained here. I feel certain this will be a good job when finished.—Bridges. All last month I had 16 men repairing all bridges, and now all are in fairly good order.—Ditches. We have 13 men looking after the ditches.

SPITZKOP FARM.—The mine manager reports, under date July 14: Have found a flat reef, and commenced to open it up, one cutting of 21 feet in length and from 8 feet to 1 foot 10 inches in depth, and a drive of 9 feet have been put it. The reef is 1 foot 10 inches in thickness, and the prospects are encouraging; also several other cuttings have been made to ascertain the value of it and its continuation. Up to writing the reef has been traced about 400 feet on its contour.—Under date July 21 he writes: The drive on the reef has been extended 16 feet, making a total of 27 feet. The reef is looking well, and is about the same thickness, and the prospects are about from 5 dwts. to 6 dwts. Another drive has been commenced on the reef, also two shafts have been commenced, which are each 16 feet deep, with a view to find the extension of same. The directors call the shareholders' attention to the great importance of the above discovery as the 10-stamp mill has been worked at a profit on mineral giving as low as 3 dwts. to the ton.

OOREGUM.—Superintendent's report for fortnight ending 30th July: Taylor's shaft. The plats at the 560 feet levels have been completed and all necessary timber fixed, skip road brought down, and sinking will be resumed forthwith. The 560 feet level south has been advanced 19 feet 6 inches, total 47 feet 6 inches. Lode 1 foot 6 inches wide, assay value 2 ounces 1 dwt. 9 grains. The 460 feet level south driven 25 feet 6 inches, total 447 feet. Lode 5 feet 6 inches wide, value 17 dwts. 10 grains. No. 1 winze 460 feet level south sunk 7 feet 9 inches, total 55 feet 3 inches. Lode 1 foot wide, value 3 ounces 3 dwts. 3 grains. No. 2 winze 460 feet level south sunk 5 feet 6 inches, total 40 feet. Lode 1 foot 4 inches wide, value 10 dwts. 20 grains. No. 3 winze 460 feet level south sunk 6 feet 6 inches, total 10 feet. Lode carried 4 feet, value 15 dwts. 6 grains. No. 4 winze 360 feet level south sunk 3 feet 9 inches, total 7 feet 9 inches. Lode 3 feet, value 14 dwts. 4 grains. Level south from back of No. 4 rise 280 feet level south advanced 16 feet 6 inches, total 70 feet. Lode 1 foot 6 inches, value 1 ounce 2 dwts. 21 grains. Wallroth's shaft sunk 7 feet, total 871 feet 6 inches. Lode 2 feet wide, value 6 dwts. 12 grains. The excavations for plats are completed; necessary timber is being fixed, which does not interfere with the sinking. The 760 feet level south driven 12 feet, total 215 feet 6 inches. Lode 1 foot 9 inches value 8 dwts. 17 grains. No. 1 winze 760 feet level south sunk 6 feet, total 28 feet 9 inches. Lode 2 feet 6 inches wide, value 7 dwts. 15 grains. The 760 feet level north resumed, and driven 3 feet 9 inches, total 104 feet 9 inches. Lode 1 foot 3 inches wide, value 5 dwts. 10 grains. No. 1 winze 760 feet level north sunk 3 feet 3 inches, total 25 feet 3 inches. Lode 6 inches, value 9 dwts. 19 grains. The 660 feet level south driven 30 feet 6 inches, total 615 feet. Lode 1 foot 9 inches, value 1 ounce 2 dwts. 21 grains. No. 2 winze 660 feet level south sunk 4 feet 3 inches, total 58 feet 9 inches. Lode 1 foot 6 inches, value 7 dwts. 15 grains. No. 3 winze 660 feet level south sunk 4 feet 9 inches, total 45 feet. Lode 1 foot, value 1 ounce 20 grains. No. 4 winze 660 feet level south sunk 6 feet, total 28 feet. Lode 6 inches, value 9 dwts. 20 grains. No. 3 rise 660 feet level south risen 5 feet 9 inches, total 39 feet. Lode 2 feet, value 5 dwts. 10 grains. No. 4 winze 560 feet level south sunk 3 feet 9 inches, total 74 feet 9 inches. Lode 2 feet value 6 dwts. 12 grains. No. 5 winze 560 feet level south sunk 1 foot 9 inches, total 84 feet 9 inches. Lode 2 feet wide, no sample taken. No. 6 winze 560 feet level south sunk 4 feet, total 86 feet. Lode 2 feet, value 1 ounce 5 dwts. The 560 feet level north has been resumed and driven 8 feet 9 inches, total 220 feet. Lode 8 inches, value 8 dwts. 17 grains. No. 7 winze 460 feet level south sunk 6 feet 6 inches, total 97 feet 6 inches. Lode 2 feet 9 inches, value 1 ounce 20 grains. The 360 feet level north driven 7 feet 9 inches, total 257 feet. Lode 3 inches, value 8 dwts. 10 grains. Incline winze on point of fold in bottom of 280 feet level north sunk 30 feet 6 inches, total 73 feet. Lode 2 feet, value 7 dwts. 10 grains. The 215 feet level north advanced 19 feet 6 inches, total 472 feet. Lode 1 foot 3 inches, value 3 ounces 5 dwts. 8 grains. The 215 feet level south on fold commenced, driven 2 feet 6 inches. Lode 1 foot 9 inches, value 1 ounce 2 dwts. 10 grains. No. 4 winze 215 feet level north commenced, sunk 5 feet. Lode 1 foot, value 1 ounce 1 dwt. 20 grains. Low's shaft sunk 6 feet, total 610 feet 10 inches. The 510 feet level south advanced 14 feet, total 161 feet 9 inches. Lode 5 feet wide, value 1 ounce 15 dwts. 6 grains. The 510 feet level north from crosscut east driven 3 feet 6 inches. Total 7 feet 6 inches. Lode very small, suspended. No. 3 winze 430 feet level south sunk 8 feet, total 14 feet. Lode 1 foot 2 inches, value 3 ounces 5 dwts. 8 grains. Probyn's shaft sunk 9 feet, total 1007 feet. The 950 feet level south driven 13 feet 6 inches, total 169 feet 6 inches. Lode 4 inches, value 6 dwts. 12 grains. No. 1 winze 950 feet level north sunk 2 feet 6 inches, total 45 feet. Lode 6 inches, value 5 dwts. 10 grains. The 850 feet level south driven 14 feet 6 inches, total 296 feet. Lode pinched. No. 1 winze 850 feet level south sunk 5 feet, total 67 feet 6 inches. Lode 6 inches, value 7 dwts. 14 grains.—Stopes for month, Taylor's shaft. Plats at 560 feet level 11 fathoms. Back of 460 feet level south stoped 10½ fathoms. Lode 4 feet 6 inches, value 1 ounce 1 dwt. 10 grains. Bottom of 360 feet level south stoped 38½ fathoms. Lode 4 feet, value 1 ounce 8 dwts. 8 grains. Back of 360 feet level south stoped 21½ fathoms. Lode 4 feet, value 1 ounce 6 dwts. 3 grains. Bottom of 280 feet level south stoped 37½ fathoms. Lode 7 feet 6 inches, value 17 dwts. 20 grains. Back of 280 feet level south stoped 5½ fathoms. Lode 2 feet, value 12 dwts. 12 grains.—Wallroth's shaft. Plats at 560 feet level 11 fathoms. Back of 560 feet level south stoped 254 fathoms. Lode 2 feet 10 inches, value 1 ounce 3 dwts. 17 grains. Bottom of 560 feet level north stoped 3 fathoms. Lode 1 foot 9 inches, value 1 ounce 18 dwts. 2 grains. Bottom of 460 feet level south stoped 16½ fathoms. Lode 1 foot 10 inches, value 1 ounce 9 dwts. 16 grains. Back of 460 feet level south stoped 2½ fathoms. Lode 2 feet, value 10 dwts. 21 grains. Bottom of 460 feet level north stoped 14½ fathoms. Lode 1 foot 9 inches, value 2 ounces 3 dwts. 19 grains. Bottom of 360 feet level south stoped 33¾ fathoms. Lode 2 feet, value 2 ounces 13 grains. Bottom of 360 feet level north stoped 1¾ fathom. Lode 1 foot, value 16 dwts. 11 grains. Bottom of 280 feet level south stoped 20½ fathoms. Lode 3 feet 3 inches, value 1 ounce 3 dwts. 17 grains. Bottom of 280 feet level north stoped 6 fathoms. Lode 3 feet, value 1 ounce 5 dwts. Bottom of 215 feet level north stoped 13½ fathoms. Lode 1 foot 3 inches, value 1 ounce 19 dwts. 4 grains.—Low's shaft. Back of 430 feet level south stoped ¾ fathom. Lode 1 foot, value 2 ounces 3 dwts. 13 grains. Bottom of 430 feet level north stoped 8 fathoms. Lode 1 foot 2 inches, value 3 ounces 2 dwts. 14 grains. Bottom of the 350 feet level south stoped 2½ fathoms. Lode 1 foot, value 8 dwts. 10 grains. Back of 350 feet level south stoped 1½ fathoms. Lode 1 foot 3 inches, value 12 dwts. Bottom of intermediate level north back of 200 level south stoped 3½ fathoms. Lode 1 foot, value 10 dwts. 20 grains.—Exploratory work. Wallroth's shaft. Cross cut west from 280 feet level south towards Munday's lode driven 16 feet 6 inches, total 456 feet. No change in the strata.—Probyn's shaft. Cross cut east from 450 feet level south driven 28 feet 6 inches, total 280 feet. —No. 2 trial shaft. The 250 feet level south driven 8 feet 6 inches, total 36 feet. Lode 2 feet, value 13 dwts. 2 grains. The 250 feet level north driven 11 feet, total 41 feet. Lode 2 feet 6 inches, value 7 dwts. 20 grains.

MOUNT ZEEHAN (Tasmania).—Manager reports for week ended July 10: Argent Section. Main engine shaft, No. 6 lode, intermediate level south. Stope continued, but ore kept below, as mill is engaged crushing for Zeehan-Montana Company. Lode from 9 to 12 inches wide of good seconds. 60 feet level south extended 12 feet 6 inches, total 202 feet 6 inches. Lode about 3 feet wide, improving and carrying some nice galena. 132 feet level south rise and stope continued. Lode from 3 to 4 feet wide; ore kept below. 132 feet level north stope continued. Lode 3 feet wide of medium quality; ore kept below. Crosscut west to No. 7 lode extended 5 feet 6 inches, total 95 feet. A change of country has taken place, and is letting out more water.—192 feet level. Have cleaned out this level to continue rise on No. 4 lode. Lode is 5 feet wide, carrying next the footwall a little second class ore. Concentrator has been run 54 hours on Zeehan-Montana Company's ore, and milled 198 tons seconds for 23 tons 14 cwts. concentrates containing about 18 tons 2 cwts. lead, and 2308 ounces of silver.

MOUNT LYELL.—The London committee have received the following report from the mine, viz., for the week ending 5th July: Engine shaft 100 feet level. The south drive has been advanced 5 feet, total 41 feet. Still in schist and ironstone.—Intermediate 75 feet. The north level has been advanced 18 feet. The rock is sandstone and conglomerate easy to work.—50 feet. The south drive has been driven 3 feet, total 144 feet. No improvement in the ground, which is still very hard and tight.—No. 1 winze. The winze has been sunk 4 feet, total 24 feet. Sinking now in schist and ironstone, the former lying between the ironstone and the pyrites.—Stopes. Work in the north stopes has been carried on as usual; the faces continue to furnish ore as required.—Ore winze. The winze at the end of the west crosscut has been sunk 6 feet, total 26 feet. This being the required depth, work here has been stopped till a connection is made with the north intermediate level.—No. 5 tunnel. The contractors have driven 20 feet, total 687 feet. The country is still very favourable for breaking, being weathered schist and conglomerate.—Surface. The new ore shed has been completed.—Ore raised. 255 bags, weighing 12 tons 15 cwts., containing 10,506 ounces silver and 2 tons 18 cwts. 2 qrs. 16 lbs. copper, or an average of 824 ounces silver and 23 per cent. copper per ton.—Ore despatched. 217 bags, weighing 11 tons 13 cwts. 2 qrs. 8 lbs., contaicing 13,181 ounces silver and 2 tons 18 cwts. 2 qrs. 20 lbs. copper.

MYSORE WEST AND MYSORE WYNAAD CONSOLIDATED.—Tank Block: The mining manager in India reports by mail under date 28th July as follows: North shaft, 350 feet level crosscut east. Total 44 feet. Work was stopped here on the 14th inst. as there was no change—South shaft. Sinking progress 5 feet 9 inches, total 419 feet. The water has not given out at all.—354 feet winze. Progress 6 feet, total 28 feet. On the 18th inst. we put in a windlass and a small donkey pump, and since then the progress has been quicker. The quartz in the lode is about 18 inches wide, and assays from seven samples 4 ounces 19 dwts. 18 grains.—354 feet level stope. This was recommenced again on the 24th inst., after having the air pipes to the winze put on the floor of the level, so that the benches will protect them from the blasting. The lode quartz is now 3 feet wide, and assays 1 ounce 6 dwts.—400 drive north from crosscut west. Progress 10 feet, total 63 feet. The quartz is still about 1 foot thick, and from seven samples assays 2 ounces 18 dwts. 12 grains.—400 south drive from crosscut west. Progress 19 feet, total 19 feet. This was commenced on the 18th inst. For the first 7 feet we drove through soft, loose, lode matter, and then struck 2 feet of quartz, which assays 12 ounces fine gold per ton. The width slightly increased, but on the 26th night narrowed to 1 foot 6 inches, and is now that width in the bottom of the level, and assays 6 ounces 8 dwts. We are still in loose disordered lode matter the whole width of the drive.

NO. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, July 6: During the fortnight Shaw and party from over the No. 1 east level have crushed 7½ tons for 1 ounce 2 dwts. of gold. Goninon and party have got about 25 tons during the fortnight from the stulls over No. 3 level. Perry and party from under the same level have from 12 to 18 inches of stone in the face. Cairns and party next to Perry's have from 3 to 8 inches of stone. This party are at present crushing. Total amount of stone raised by the different parties, 30 tons.—(Signed) H. Davis.

NAMAQUA.—Abstract of superintendent's report for June: Tweenfontein Mine. Shaft. This is now to the required depth for the 125 fathom level.—125 fathom level north. This is being driven to intercept the lode. The ground passed through is chiefly quartzite, with occasional spots of copper ore.—115 fathom level west. The ground at this point is a little more broken than when the driving was first started, but otherwise there is no change.—105 fathom level east. This driving is still in what appears to be a very large body of mineral ground. Worth 5 tons of ore per fathom.—105 fathom level west. A considerable falling off has taken place in this level, and the present forebreast is worth about 3 tons of ore per fathom.—105 fathom level west, No. 27 winze. This winze is still opening up a very valuable section of ground, and is worth 10 tons of ore per fathom.—95 fathom level east, No. 26 winze. This is now connected with the 105 east, and will afford good facility for stoping, the ground being laid open at that point. Worth 5 tons of ore per fathom.—95 fathom level west. There is no change to report here. Worth 4 tons of ore per fathom.—85 fathom level west. This driving has slightly improved in value. The full width of the lode is not known, but it appears to be massive, and the part carried is spotted with copper throughout.—Stopes, 105 fathom level west. 95 fathom level west, bottom of level. These stopes continue to yield well, and are worth 10 tons of ore per fathom.—New Shaft. 25 fathom level east. Drivings have been put out on each side at the eastern end of the ore body, but nothing of value has been met with.—25 fathom level west. This continues to open up a valuable section of ground. Worth 10 tons of ore per fathom.—Phillips' Shaft. Work is suspended here *pro tem.*—Output for July. 450 tons of ore of 30 per cent.

COLOMBIAN HYDRAULIC.—T. P. Sharman, July 20: Run No. 195. After a run of 41 days, during which time we have been washing 839 hours, with our full water supply, we have cleaned up a total of $9528·24, or about £1905, at a cost of $3764 (gold) leaving a profit of about £1144. This is a result which I consider highly satisfactory, especially when it is remembered that we are building houses, and making extensive clearings for the new opening, and that all these charges are against the sluice gold. Were it not for this, expenses could be cut down somewhat, as "Clarke's Banks" are cheap to work. At a distance of 560 feet ahead of the upper end of the old low level sluice, I sank a shaft, and I find there is a narrow and deep channel there. Up to now we have not reached the centre of this channel, but we have already cut through a streak of soft yellow gravel giving about $2 gold per yard. Unfortunately this streak is only about 1 foot thick. On finding this channel, I at once commenced an adit at the point where the old sluice ended, and I believe this will open up a considerable extent of drifting gravel.

NEW QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, July 6: I beg to submit my report on work done in your mine during the past fortnight.—Underlie shaft. The underlie shaft has been sunk a further depth of 13 feet, making 124 feet from No. 5 plat with no change. We have started to open out the No. 6 south level at about 15 feet from the bottom of underlie; there is a thin vein of stone to start with, which, I think, will improve as the drive advances.—No. 4 south level. Stoping has been carried on over this level, the reef varying in size from 3 to 10 inches, with occasional patches of blank ground. The ground continues hard and bad for breaking.—No. 5 south level. This level has been extended a further distance of 10 feet, making a total distance of 307 feet from underlie shaft. There is about 8 inches of reef in the end of level. Stoping has also been carried on over this level; the reef is very irregular and bunchy varying from 3 inches to 1 foot, and the stone looks rather white. No. 5 north level has been extended 9 feet, making a total distance from underlie shaft 217 feet, with about 3 inches of stone in the face. —No. 4 formation, No. 1 north level. Stoping has been carried on over this level, the formation varying from 3 feet to 10 feet in width. The reef is very irregular, from 3 inches to 9 inches. There is every appearance of the formation in the stopes becoming less as the footwall is rising at a much greater angle.—No. 1 south level. This level has also been extended a further distance of 9 feet, making 117 feet from end of crosscut. There is about 18 inches of formation in the end of level, mixed with leaders all through, thus making the ground tedious for drilling. Two shifts are now working in this level. We suspended work on the evening of the 29th June for the purpose of overhauling the machinery and cleaning out the boilers, and am pleased to report everything in good order. Work was resumed on the 3rd inst. Quantities of quartz raised during the fortnight, No. 4 south level stopes 157 trucks, No. 5 south level stopes 113 trucks, No. 4 formation 146 trucks, total 416 trucks.—(Signed) William Henderson, mine manager.

TOLIMA.—The directors have received advices by the mail of August 23 from their mines, of which the following is an abstract: —Frias estimated June returns (170 tons) silver valued at 29d. per ounce, £7055 16s. 5d.; cost, £3805 1s.; profit, £3250 15s. 5d. The underground agent reports 119 fathoms 4 feet 1 inch of ground expended, of which 84 fathoms 3 feet 6 inches were productive, leaving of unproductive ground 35 fathoms 0 feet 7 inches. The superintendent reports an improvement in the grade of the ore during the month of June, and calls attention to the fact that though the amount of export ore raised was limited to 170 tons, the amount of exploratory work prosecuted during the month was unusually large, reaching 35 fathoms. He further reports having opened out 805 tons of new mineral in the first half of the current year, which he estimates as representing in value £31,500. The 120 east north branch is reported as continuing to improve, and great improvement is stated to be visible in the 100 west sink north branch, where the yield is estimated at 3 tons of good grade mineral per fathom, but, at the date of writing, the superintendent reports all the other exploratory points as unproductive.—Underground Report. Engine shaft. The tip plat at the 130 fathom level is finished, and the skip road has been brought down from the 120 to the 130 fathom level. The shaft was sunk 1 foot, thus making 15 feet as total depth below the 130 fathom level. It has been in contact with a dropper from the main lode, and same has given some rich bits of mineral. To date we are sinking with a full force of men, and we shall endeavour to push it on as fast as possible, in order to reach the 140 fathom level. 140 fathom west end was driven 16·4 feet by two men at $70 per fathom, thus being 67·7 feet as total west of the winze. The lode has again become disordered, and has yielded 5 cwts. of mineral per fathom. 140 fathom east end was driven 27·2 feet by four men, at $80 per fathom, thus being 120·5 feet as total east of the winze. The yield of mineral has been rather irregular, and the lode has given 2 tons of mineral per fathom, and to date it only gives a little mineral in broken patches; yet the lode holds strong, and the prospect seems fair to further improvement. 130 fathom west end was driven 24 feet by four men and a boring machine, at $87 per fathom, thus being 305·2 feet as total west of the winze, and the lode remains strong but unproductive. 130 fathom west back stope No. 1 was stoped 60 7 feet by eight men at $28 per fathom, and yielded 4 tons of mineral per fathom. 130 fathom west back stope No. 2 was stoped 9 feet by four men and on company account during the last week of the month, and yielded 4 tons of mineral per fathom. 130 fathom east end north branch was driven 3·5 feet by two men at $75 per fathom during a part of the month, and the lode remains unchanged. 130 fathom cross cut to engine shaft has been widened in order to give room for tramroads to shaft. 120 fathom west back stope No. 1 was stoped 54 feet by six men at $33 per fathom, and yielded 1 ton of mineral per fathom. 120 fathom west west back stope No. 1b was stoped 44·6 feet by six men at $30 per fathom, and yielded 2½ tons of mineral per fathom. 120 fathom west back stope No. 2 was stoped 36·1 feet by two men at $20 per fathom, and yielded 10 cwts. of mineral per fathom. 120 east end north branch was driven 15·8 feet, by two men at $70 per fathom, and has yielded some good bits of mineral throughout. 120 fathom east back No. 1 was stoped 37·1 feet, by four men at $35 per fathom, and yielded 1 ton of mineral per fathom. 120 fathom east back stope No. 1a was stoped 49 5 feet four men at $25 per fathom, and yielded 2½ tons of mineral per fathom. 110 fathom east end was driven 30·8 feet by four men and a boring machine at $70 per fathom, thus being 784·4 feet as total east of the engine shaft and the lode remains poor. 110 fathom east cross branch was driven 10 feet by two men at $95 per fathom and is suspended. 110 fathom east back stope No. 3 was stoped 42 feet by four men and on company account, and it yielded 6 tons of mineral per fathom. 110 fathom east bottom stope was stoped by two men and on company account during the last few days of the month, and it yielded 1 ton of mineral per fathom. It is situated from the west end of the east winze No. 3. 100 fathom east back stope No. 1 was stoped 42 feet by two men at $22 per fathom, and yielded 15 cwts. of mineral per fathom. 100 fathom east back stope No. 1a was stoped 56 feet by four men at $30 per fathom, and yielded 2 tons of mineral per fathom. 100 west sink north branch was sunk 3 feet during a part of the month by four men and on company account, and it yielded 10 cwts. of mineral per fathom. It is situated about 15 fathoms west of the engine shaft, and is upon a portion of the lode that is gone off north of the main lode. 90 fathom east end was driven 16 feet by two men at $68 per fathom, thus being 898·9 feet as total east of the engine shaft, and the lode remains poor. 90 fathom east winze was sunk 24 feet by eight men at $120 per fathom, thus being 92 feet as total depth below the sole of the 90 level, and the lode remains poor. It is now suspended, and the men are put to rise from the 110 fathom level with the object of holing to the above winze. 90 fathom east end Welton's lode was driven 18·5 feet by two men at $65 per fathom. The lode has been giving some good stones of mineral, and yet remains promising. 80 fathom east stope was stoped 26 feet by two men at $28 per fathom, and yielded 15 cwts. or mineral per fathom. Shallow adit was driven 35 feet by four men at $50 per fathom thus being 87·5 feet as total west of the cross cut, and the lode remains unproductive. Crosscut to new lode was driven 4·1 feet by two men at $150 per fathom, thus being 389·7 feet as total length. It is now suspended, and the men are put to drive west upon the lode that was intersected some time ago.—Real de Frias. West shaft was sunk 16·5 feet by eight men on company account, thus making 113·5 feet as total depth below the sole of the deep adit. The lode has continued wide and strong, but remains poor. Deep adit west was driven 19·2 feet by two men at $36 per fathom, thus making 536·35 feet as total west of the shaft. The lode has continued to yield some good stones of mineral, and the present prospect yet holds favourable to further improvement.

The production of gold of the Ruda Mines in Transylvania for the month of July amounted to 43,529 grammes.

GRAVEL GOLD.—L. Scrutton, July 20; Runs Nos. 7 and 8. After breaking through the rim mentioned in my previous report on June 28, we cleaned up the short temporary sluices into which we had been washing, the gross result being $3552 gold after washing 962 hours. On the evening of the clean up day the machines were at work again, the dirt running down the long sluices of the Rica opening. If all goes well I shall clean up run No. 8 during the first week in August. The ditch and syphons are in good condition, and the new ditch and pipe line have been giving complete satisfaction.

ORITA.—H. J. Prender, July 5: Mine. All is running very satisfactorily, and we are washing constantly, having no stoppages or accidents. From what I see we shall do well to run till about the 23rd inst., and I expect our clean up will be satisfactory. The tunnel has been a very great help to us, and owing to the extra grade it has given, we shall be able to clean down the ground cut in very little time, probably in one and a-half days. The ditch, syphons, &c., are all in good working order. We are having very dry weather, but as yet we are not short of water.

UNITED GOLD FIELDS OF MANICA.—Return of mining work done during the two weeks ending June 30: Adit No. 1. Distance driven 4½ feet, total length to date 559½ feet. Double shift stopped on the 28th inst., owing to lack of fuse. No change in rock.—Adit No. 2. Distance driven 4 feet, total length to date 717 feet. Four days cutting water drain along floor.

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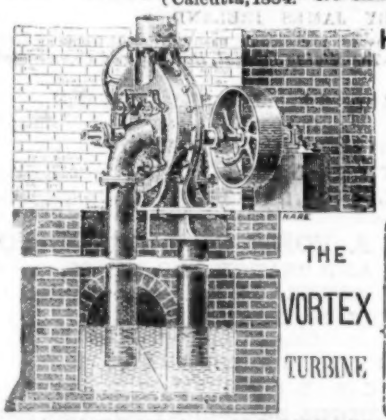

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THE GOLD MINES OF WESTERN AUSTRALIA.

A NEW COMPANY TO BE FLOATED.

LAST week we announced briefly that a new West Australian Company, the guiding spirit of which was Mr. Albert F. Calvert, was on the eve of flotation. Since the publication of the paragraph announcing this, we have obtained further particulars from official sources, and these we now place before our readers. The name of the new enterprise is to be "The Gold Mines of Western Australia," with a capital of £90,000, in 90,000 shares of £1 each, is about to be presented to the public, and from the particulars which have been placed before us respecting it, we look upon it as promising. The company has been formed for the purpose of acquiring, developing, and working gold, precious stones, and other valuable mineral properties in Western Australia.

The founder of the company is Mr. Albert F. Calvert, of Old Broad Street, E.C., who is recognised as one of the leading authorities in connection with the exploration of Western Australia, and is well-known as the author of several works bearing on its vast mineral resources. For many years he has made a special study of the mineral resources of the colony, and the result of his investigations and discoveries, as laid before several of the learned societies of Great Britain and Australia, has convinced him that Western Australia is destined, ere long, to take a foremost position among the gold producing countries of the world.

Mr. Calvert states that this long-neglected colony literally teems with mineral riches; and, while holding very strong views in regard to the extent and richness of the gold deposits of the Kimberley, Murchison, and Coolgardie districts, he has reason, from what he has seen and discovered, to pin his faith, as a mining expert, to the Pilbarra district, which lies in the extreme north-west of the colony. Apart from the exceeding richness and the great extent of its deposits, there is plenty of water available for mining purposes on this gold field. There is also, he says, abundance of timber for fuel, and easy access to a good shipping port, all of which are matters of vital importance in gold mining.

It is to this rich district of the north-west that Mr. Calvert has accordingly determined to confine his attention; and in order that this company may be an immediate success, he has made arrangements whereby provisional agreements have been entered into for the purchase of the following property:—

The Coongan Mine.

This is not only a proved mine, but a going concern, with special and important water rights. According to the report of Mr. Calvert, there are three well-defined reefs on the property, one of which has been proved over 1000 feet in length to a depth of 50 feet, and averages from 4 feet to 4 feet 6 inches in width. Nearly £10,000 has been spent by the present owners in opening up and developing this mine, and on the plant and machinery, which are now at work, and capable of treating 120 tons of ore weekly. Several hundred tons of ore has been extracted from this mine, which have given over 2 ounces to the ton, while a large quantity of ore from the No. 2 reef has given 4 to 5 ounces; and the following cablegrams have lately been received from Mr. Augustus S. Roe, solicitor to the Union Bank of Australia (Roebourne Branch), as to the present position of the works:—

June 27, 1894.—"The Coongan Mine looks splendid; the new machinery is working splendidly."

July 4, 1894.—"Coongan Mine has developed a large body of high grade ore; 500 tons milled gave over 2 ounces per ton."

August 3, 1894.—"Reef proved to a depth of 121 feet. The width of the reef is 5 feet. Stone averages 2 ounces of gold to the ton. The mine looks splendid."

The intention of the directors is to increase the present milling capacity from 120 to 250 tons weekly at once, in accordance with the recommendation of Mr. Calvert, and to add thereto as the mine opens up. This capacity of mill, working on a similar class of ore to that which is now being produced, will, in his opinion, yield a net profit from this mine alone of over £45,000 per annum, equal to 50 per cent. on the capital of the company.

The Calvert Discoveries.

Besides the above property which this company has purchased the directors have secured the option of acquiring several very rich gold reefs discovered by Mr. Calvert, in the course of his explorations (1890 to 1893). The most valuable of these he purposes on his return to the colony to secure on behalf of this company, as also any other discoveries he may make in his further exploitation of this auriferous district; and it may here be stated that, in addition to gold, Mr. Calvert has reason to believe that in the vicinity of the Pilbarra Gold Field he has discovered valuable diamondiferous ground, and also rich deposits of tin, all of which, when taken up, will become the property of the company. These, it is expected, will add considerably to the resources of the company. It is not, however, the intention of the directors to work these outlying properties themselves, but to dispose of them as opportunity offers, so that the company will in reality become *quoad* these a parent company, thereby adding considerably, as they hope, to the income which will be derived from their own workings.

Mr. Calvert has such confidence in the future of this undertaking that he stipulates that the consideration for his discoveries shall be in fully paid up shares only, and he has not only resigned all his appointments, but has declined many offers and inducements which have been made to him, inviting him to become engineer, director, or Chairman on many of the companies that have been floated or are about to come before the public. All such advances he has declined in order to keep himself free so as to give his whole energies towards the promotion of interests of this undertaking. The price to be paid for the above mines and the Calvert discoveries is £65,000, payable as to £8500 in cash, and as to the balance in fully paid up shares.

Seizure of the Ship Islam at Glasgow.—The steamship *Islam*, belonging to a Japanese firm, which has been seized on a warrant issued by the Foreign Secretary to the British Government, is being elaborately and carefully fitted up throughout with Baird, Thompson, and Co.'s latest improved mechanical system of ship ventilation, which is capable of changing the whole atmosphere of the ship once every minute, if necessary. This system can be used with closed hatches and everything battened down, is perfectly weatherproof, and under perfect control. This installation is considered to be of so much importance that it is being personally supervised by two of the members of the firm of Baird, Thompson, and Co. (Limited), ventilating engineers, of London and Glasgow.

New Ironworks at Oldbury.—On Wednesday new ironworks, which have been erected by Messrs. Ratcliffe and Co., of the Anchor Forge, Smethwick, in Halesowen-street, Oldbury, were started. The concern, which is to be named the Anchor Ironworks, comprise a number of puddling and mill furnaces and rolling mills. When they are in full swing, employment will be found for a considerable number of operatives.

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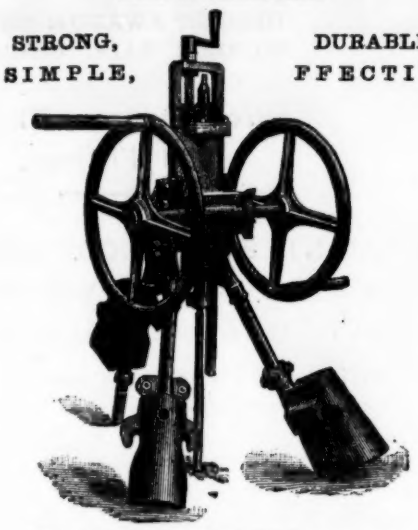

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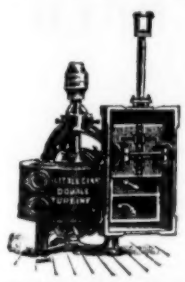

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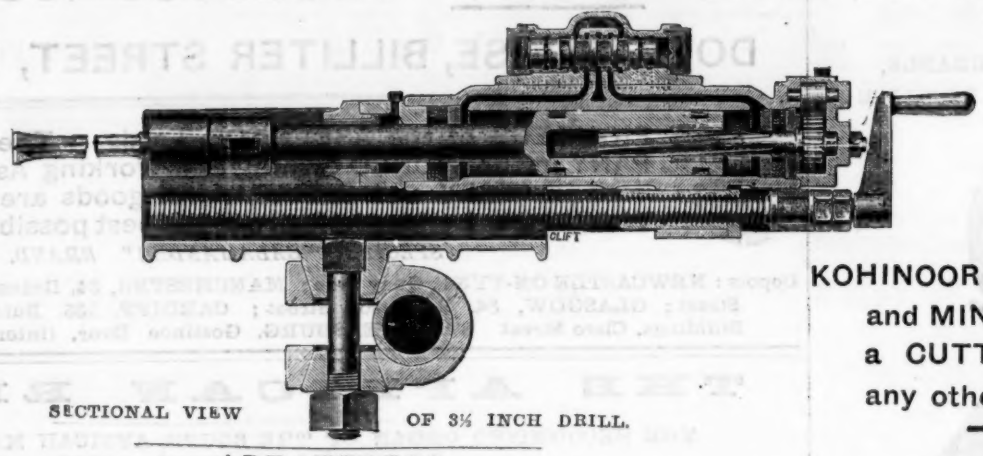

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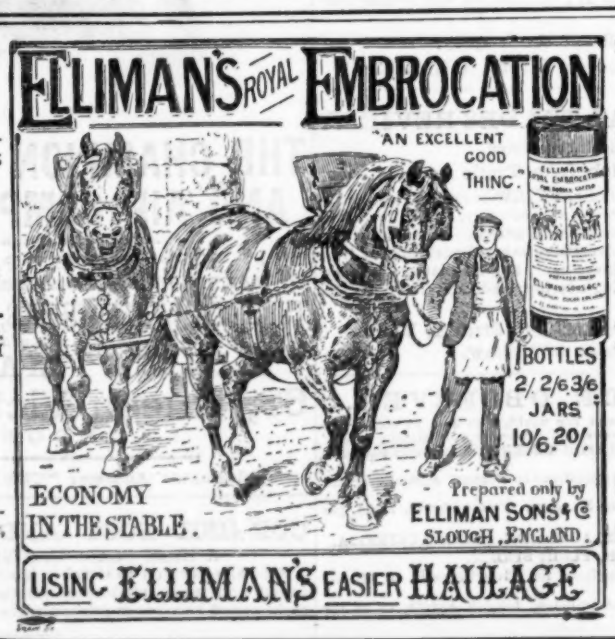
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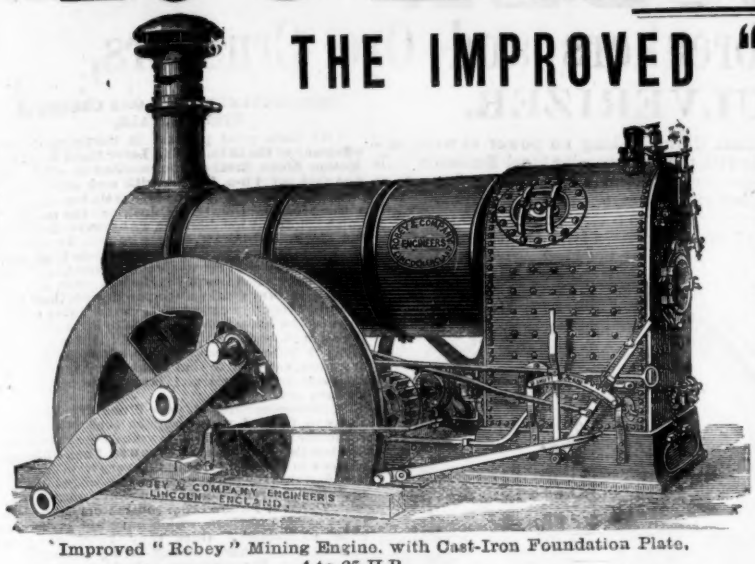

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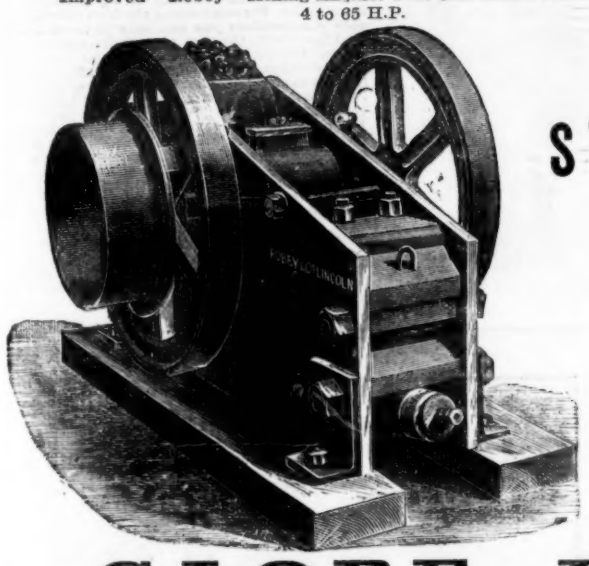

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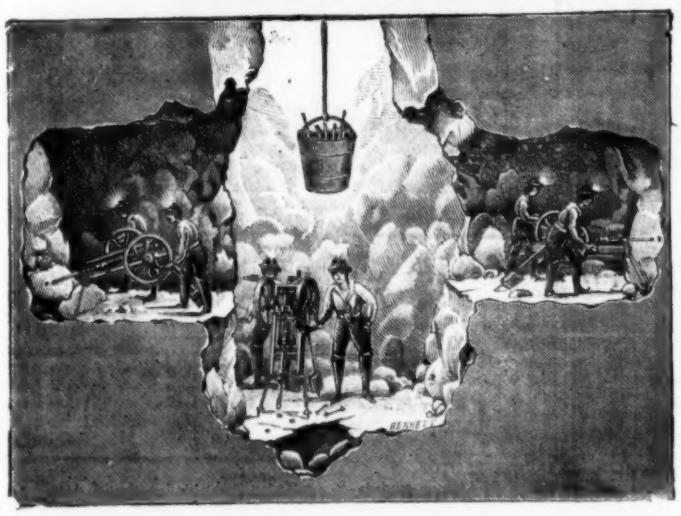

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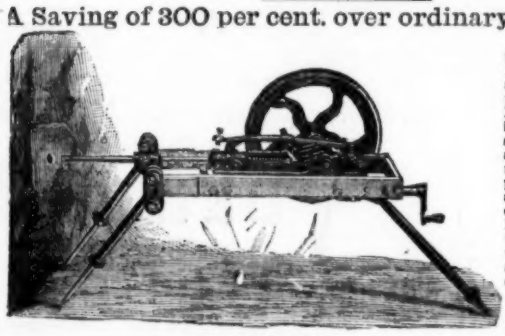

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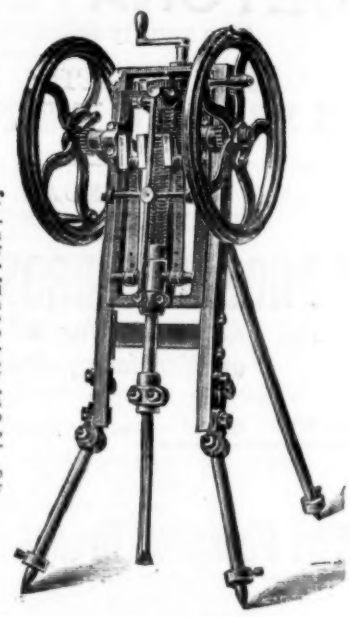

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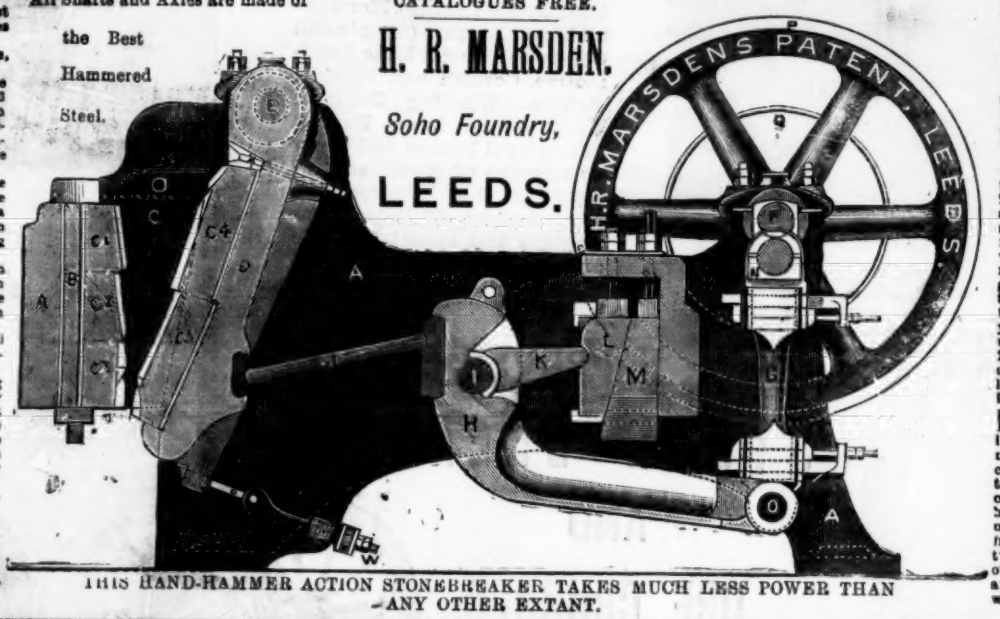

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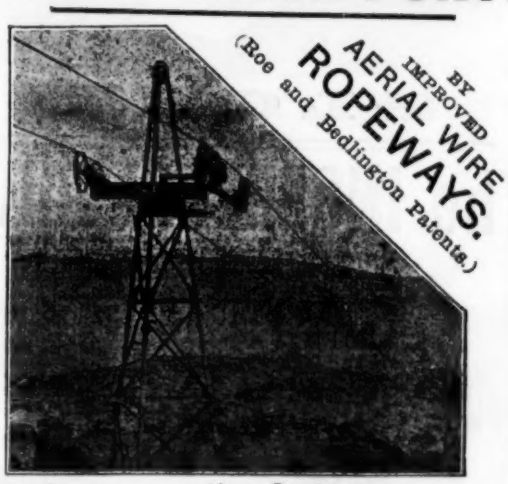

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